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September 27, 2007

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington DC 20426

Re: Rockies Express Pipeline Project, REX-East  
Agricultural Impact Mitigation Plans  
Docket No. CP07-208-000

2007 SEP 27 A 11:56

RECEIVED  
SECRETARY

Dear Ms. Bose:

Pursuant to the request of the Commission Staff in the above-referenced proceeding, Rockies Express Pipeline LLC, hereby submits modified Agricultural Impact Mitigation Plans (AIMP) with respect to construction in agricultural lands of the REX-East pipeline in the states of Illinois, Indiana and Ohio. Rockies Express is not modifying the AIMP submitted with its application (April 30, 2007) for construction activities in agricultural lands in Missouri.

I. Resolution of an Agricultural Impact Mitigation Agreement

Rockies Express has been negotiating with the various agricultural agencies in Illinois, Indiana, and Ohio to develop an Agricultural Impact Mitigation Agreement (AIMA). Although Rockies Express sought to reach one agreement with the three states, the Illinois Department of Agriculture and the Ohio Department of Natural Resources - Division of Soil and Water Conservation expressed their desire to have an AIMA developed specifically for their respective state.

A. ILLINOIS

A revised version of the AIMA was submitted to Rockies Express in August 2007 by the IL DOA. Rockies Express reviewed this version and met with representatives on September 10, 2007 to discuss issues relative to the revised AIMA. The following issues were discussed.

1. Depth of Cover - Crop lands and agricultural lands with prime farmland soils

Rockies Express proposed a minimum pipeline depth of cover based on a measurement made from the lowest shoulder of the trench, after topsoil had been segregated. Topsoil segregation, as proposed, includes all of the A-horizon soils to a depth not to exceed 16-inches. In areas where the pipeline is co-located with other underground pipelines, then a

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depth of cover equal to that of the parallel pipeline but not less than 3-feet (also measured from lowest shoulder of ditch) was proposed. The proposal by Rockies Express is consistent with Department of Transportation ("DOT") depth of cover regulations.

The IL DOA, in its August version of the AIMA, did not accept Rockies Express' depth of cover method and proposed a 5-foot cover requirement in cropland and areas with prime farmland, regardless if the pipeline was co-located or not. The Illinois DOA "Construction Standards and Policies" specifies: "substantially the same top cover as an existing parallel pipeline, but not less than 3 feet, where the route parallels an existing pipeline within a 100 foot perpendicular offset." The proposal by Rockies Express for co-location depth of cover, applies to the 100-foot offset parameters set forth in the Illinois provisions.

Rockies Express informed the IL DOA during the September 10, 2007 meeting it would accept a 5-foot cover requirement in non-co-located areas with prime farmland, and requested the IL DOA reconsider its proposal of 5 feet in co-located areas and return to the original and published guidelines. The IL DOA stated, in response, that it would consider this compromise and inform Rockies Express of its decision.

## **2. Agricultural Lands Definition**

The IL DOA's definition of agricultural lands includes "managed woodlands." Rockies Express requested that "managed woodlands" be deleted and a qualifying statement of "within 100-feet" be added to the definition for the managed woodlands where the pipeline is on land with farm buildings. The IL DOA is reviewing this proposal.

## **3. Rock Removal**

The IL DOA recent version of the AIMA deleted the word "surface" from the rock removal requirement proposed by Rockies Express in areas where topsoil had been returned to preconstruction grade. In doing so, this could be interpreted that Rockies Express would be required to sort the entire topsoil pile for rock greater than 3" prior to replacement.

The IL DOA agreed that this interpretation was not the intent of the deletion, and suggested that use of a "rock rake" be inserted in the requirement for clarification. This was acceptable to Rockies Express.

## **B. INDIANA**

Rockies Express will meet with representatives of the Indiana Utilities Regulatory Commission (IURC), who were recently assigned the responsibility to coordinate the application of recently approved agricultural construction guidelines to agreements between the state of Indiana and interstate pipeline companies. Because these guidelines were recently published, the IURC has extended due dates for Rockies Express response to these guidelines.

**C. OHIO**

Rockies Express is in negotiations with regard to depth of cover with the Ohio Department of Natural Resources-Division of Soil and Water (ODNR-SWCD). Rockies Express is anticipating a compromise similar to the one offered to the IL DOA but with four feet of cover in non co-located areas and prime farmland as described in their guidelines and three feet of cover in collocated areas and if acceptable, will negotiate an AIMA with the ODNR-SWCD.

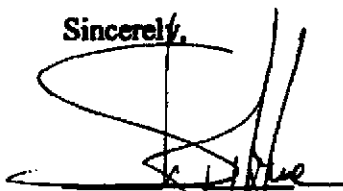
**II. Submission of Modified Agricultural Impact Mitigation Plans**

Rockies Express hereby submits modifications to the "Agricultural Impact Mitigation Plan" ("AIMP"), filed as part of the Environmental Report in Appendix G to Resource Report No. 1 of its April 30, 2007 Application for Illinois, Indiana and Ohio.. The amended AIMP is now broken out as state-specific plans, with the modifications to the original AIMP set forth in red-line format for each state. Each state AIMP reflects the significant compromise that Rockies Express is willing to undertake for each state with respect to construction on agricultural land. The modified AIMPs, in all instances, comply with, or exceed, FERC and DOT regulations.

Rockies Express will submit signed AIMA's for those states in which they are secured as soon as they are available.

If there are any questions with respect to this material, or further clarification is required please contact Jim Thompson at (402) 960-3133.

Sincerely,



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Attorneys for  
Rockies Express Pipeline LLC

cc: Alisa Lykens  
Laura Turner  
Don Hammer  
All parties

# ILLINOIS

## **ROCKIES EXPRESS PIPELINE - EAST PROJECT**

### **AGRICULTURAL IMPACT MITIGATION PLAN**

pertaining to the construction of a

### **42-inch NATURAL GAS PIPELINE AND RELATED APPURTENANCES**

in

**PIKE, SCOTT, MORGAN, SANGAMON, CHRISTIAN, MACON,  
MOULTRIE, DOUGLAS and EDGAR COUNTIES, ILLINOIS**

The following pipeline Agricultural Impact Mitigation Plan (Plan) construction standards and policies are recommended to help preserve the integrity of any agricultural land that is impacted by pipeline construction. They were developed with the cooperation of agricultural agencies, organizations, landowners, tenants, drainage contractors, and pipeline companies.

The below prescribed construction standards and policies are applicable to construction activities occurring partially or wholly on privately owned agricultural land. With the exception of Item No. 3, they are not intended to apply to construction activities occurring entirely on public right-of-way, railroad right-of-way, publicly owned land, or privately owned land that is not agricultural land. The Company shall, however, adhere to the construction specifications relating to the repair of outlets for drain tile and/or surface drainage when they are encountered on lands owned or leased by others.

The standard and construction specifications are for mineral soils only and, therefore; do not pertain to organic muckland soils.

### **INTRODUCTION**

The Rockies Express Pipeline (Company) shall retain qualified Agricultural Inspectors on each work phase of the project. This shall include the initial construction plan development, the construction, the initial restoration, and the post-construction monitoring and follow-up restoration. The Agricultural Inspector shall act to assure that the provisions set forth in this document or in any separate agreement, will be adhered to in good faith by the Company and by the pipeline installation contractor, and that all agreements protect the resources of both the landowner and the Company.

The Agricultural Inspector shall assist with the collection and analyzing of site-specific agricultural information gathered for the construction plan development by the Company. This information shall be obtained through field review as well as direct contact with affected landowners and farm operators, local County Soil and Water Conservation District, Agricultural Extension Agents, and others. The Agricultural Inspector shall maintain contact with the appropriate on-site Project Inspectors throughout the construction phase. The Agricultural Inspector also shall maintain contact with the affected landowners and farm operators in conjunction with Company rights-of-way agents, as well local county Soil and Water Conservation District personnel concerning farm resources and management matters pertinent to the agricultural operations and the site-specific implementation of the construction plan. The Company shall provide a courtesy copy of information to the appropriate local County Soil and

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Water Conservation Districts at any time a request for a construction plan modification is submitted.

The Company will employ Agricultural Inspectors that are at a minimum thoroughly familiar with the following:

- Rockies Express Plan and Procedure
- Pipeline Construction Sequences and Process
- Trained in all aspects of soil and water conservation
- Familiar with farm operation
- Good oral and written communication skills
- Ability to work closely with the landowners and project sponsor

The Company will employ a minimum of one Agricultural inspector per construction (installation) spread.

The Company shall encourage its pipeline contractor(s) to use, where and if available, local drain tile contractors to redesign, reconstruct, and/or repair any drain tile lines that are affected by the pipeline installation. Often the local contractors may have installed the Landowner's drain tile system and can have valuable knowledge as to the location, depth of cover, appurtenances, and any other factors affecting the tile operation. The drain tile contractor(s) shall follow the attached construction specifications.

The Company shall provide the Landowner a copy of that portion of the final plans that affect his property and any plans or maps that contain the information described below concerning agricultural areas and or uses.

Unless an easement specifically provides to the contrary, the actions specified in the pipeline standard and construction specifications attached to this Plan will be implemented in accordance with the conditions listed below:

- A. The Company shall provide a copy of this Plan to the Landowner and the Landowner can forward to their Tenant prior to obtaining an easement from said Landowner. Additionally, Rockies Express will provide a copy of this Plan to each of the Soil and Water Conservation Districts and Farm Bureau offices through which the pipeline traverses.
- B. All actions are subject to change by Landowners, provided such changes are negotiated in advance of construction and acceptable to the Company, FERC and any permitting agency. To satisfy FERC requirements, any modification to an action must provide an equal or greater level of environmental protection than the original action and may need the approval of FERC before it can be implemented.
- C. The Company may negotiate with Landowners to carry out the actions that Landowners wish to perform themselves, but shall not compensate the landowner for any measures carried out themselves until final inspection has been approved by the Company and at a minimum any measure carried out by a land owner has followed guidelines set forth in the Rockies Express Plan.

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- D. All mitigative actions employed by Rockies Express, unless otherwise specified in these construction standards and policies or in an easement negotiated with a landowner, will be implemented within 45 days of completion of the pipeline facilities on any affected property, weather and landowner permitting. Temporary repairs will be made by Rockies Express during the construction process as needed to minimize the risk of additional property damage that may result from an extended construction time period. If weather delays the completion of any mitigative action beyond the 45 day period, Rockies Express will provide the affected landowner(s) with a written estimate of the time needed for completion of the mitigative action.
- E. Unless otherwise agreed to by Landowners all actions pursuant to this Plan shall extend to associated future construction, maintenance and repairs by the Company.
- F. After construction, Rockies Express will provide the Landowners with drawings showing the location by survey station of tile lines encountered in the construction of the pipeline. The drawings will include a depth measurement from existing ground and will be provided on a county-by-county basis to the SWCDs.
- G. The Company shall implement the actions contained in this Plan to the extent that they do not conflict with the requirements of any applicable federal, state and local rules and regulations and other permits and approvals that are obtained by the Company for the project. The provisions and requirements of this Plan shall be deemed to be included in all easements associated with agricultural lands unless the easement specifically provides to the contrary.
- H. Each action contained in this Plan shall be implemented to the extent that such action is not determined to be unenforceable by reason of the actions approved by, or other requirements, of the FERC Certificate issued for the project. The Company agrees to include this Plan as part of its submissions to FERC and hereby expressly agrees to the inclusion of the terms contained in this Plan in the Environmental Impact Statement to be issued in conjunction with the anticipated Certificate of Public Convenience and Necessity.
- I. Prior to the construction of the pipeline, the Company shall provide each Landowner and Tenant with a telephone number and address which can be used to contact the Company, both during and following the completion of construction, regarding the work that was performed on their property or any other construction-related matter. The Company shall respond promptly to Landowner and Tenant telephone calls and correspondence.
- J. Certain provisions of this Plan require the Company to consult or agree with the Landowner and Tenant(s) of a property. The Company shall engage in a good faith effort to secure the agreement of both Landowner and Tenant in such cases. In the event of a disagreement between Landowner and Tenant, the Company's obligation under this Plan shall be satisfied by securing the Landowner's agreement. Legal documents executed between the Landowner and Tenant will be part of the acquisition.
- K. If any provision of this Plan is held to be unenforceable, no other provision shall be affected by that holding, and the remainder of the Plan shall be interpreted as if it did not contain the unenforceable provision.

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- L. A local forester shall be hired by the Company to appraise the merchantable value of any timber to be cut for construction of the pipeline. The Landowner shall be compensated 100 percent of the value.

**Definitions**

**Agricultural Land**

Land which is presently under cultivation; land which has been previously cultivated and not subsequently developed for non-agricultural use; and cleared land which is capable of being cultivated. It includes land used for cropland, hay land, improved pastureland, truck gardens, farmsteads, commercial agricultural related facilities, feedlots, livestock confinement systems, land on which farm buildings within 100 feet of the pipeline are located, and land in government set-aside programs.

**Best Management Practice (BMP)**

Any structural, vegetative or managerial practice used to treat, prevent or reduce soil erosion. Such practices may include temporary seeding of exposed soils, construction of retention basins for storm water control and scheduling the implementation of all BMP's to maximize their effectiveness.

**Company**

Rockies Express Pipeline LLC, hereafter referred to as "Rockies Express", utility company, and any contractor or sub-contractor in the employ of Rockies Express for the purpose of completing the pipeline or any mitigative actions contained herein it's successors, and assigns, on its own behalf and as operator of the Company.

**Cropland**

Land used for growing row crops, small grains, or hay; includes land which was formerly used as cropland, but is currently in a government set-aside program and pastureland that was formerly utilized as cropland or is comprised of prime farmland.

**Drain Tile**

Any artificial subsurface drainage system including: clay and concrete tile, vitrified sewer tile, corrugated plastic tubing, and stone drains.

**Landowner**

Person(s) holding legal title to property on the pipeline route from whom Rockies Express is seeking, or has obtained, a temporary or permanent



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easement, or any person(s) legally authorized by a landowner to make decisions regarding the mitigation or restoration of agricultural impacts to such landowner's property.

Non-Agricultural Land

Any land that is not "Agricultural Land" as defined above.

Pipeline

The pipeline and its related appurtenances described in the Company's application to the Federal Energy Regulatory Commission for a Certificate of Public Convenience and Necessity.

Prime farmland

Agricultural land comprised of soils that are defined by the USDA Natural Resources Conservation Service as being "prime" soils (generally considered the most productive soils with the least input of nutrients and management).

Right-of-way

Includes the permanent and temporary easements that Rockies Express acquires for the purpose of constructing and operating the pipeline.

Surface Drains

Any surface drainage system such as shallow surface field drains, grassed waterways, open ditches, or any other conveyance of surface water.

Tenant

Any person lawfully residing on or in possession of the land.

Topsoil

The upper most part of the soil commonly referred to as the plow layer, the A layer, or the A horizon, or its equivalent in uncultivated soils. It is the surface layer of the soil that has the darkest color or the highest content of organic matter (as identified in the USDA County Soil Survey and verified w/ right-of-way samples).

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**Construction Standards and Policies**

**1. Pipeline depth**

A. Except for aboveground piping facilities, such as mainline block valves, tap valves, meter stations, etc., the pipeline will be buried with:

1. a minimum of 5 feet of top cover where it crosses cropland.
2. a minimum of 5 feet of top cover where it crosses pasture land or other agricultural land comprised of soils that are classified by the USDA as being prime soils.
3. a minimum of 3 feet of top cover where it crosses pasture land and other agricultural land not comprised of prime soils.
4. a minimum of 3 feet of top cover where it crosses wooded/brushy land.
5. substantially the same top cover as an existing parallel pipeline, but not less than 3 feet, where the route parallels an existing pipeline within a 100 foot perpendicular offset.
6. A minimum of 60 inches of cover shall be maintained over the top of the pipeline where it crosses surface drains, diversions, grassed waterways, open ditches, and streams.

B. Notwithstanding the foregoing, in those areas where (i) rock in its natural formation and/or (ii) a continuous strata of gravel exceeding 200 feet in length are encountered, the minimum depth of cover will be 24 inches.

C. On agricultural land subject to erosion, Rockies Express will patrol the pipeline right-of-way with reasonable frequency to detect areas of erosion of the top cover. In no instance will Rockies Express knowingly allow the depth of top cover to be less than 3 feet, except as stated in 1.C. above.

**2. Soil Removal and Replacement**

A. The topsoil shall be determined by a properly qualified agricultural inspector, soil scientist or soil technician who will set stakes or flags every 200 feet along the right-of-way identifying the depth of topsoil to be removed. As an alternative to staking or flagging, the Company may depict topsoil depths on alignment sheets based on published county-level soil survey information, if approved by the landowner.

B. At a minimum, the actual depth of the topsoil, not to exceed 16 inches, will first be stripped from the area to be excavated above the pipeline and the subsoil storage area. The topsoil will be stored in a windrow parallel to the pipeline trench in such a manner that it will not become intermixed with subsoil materials. Rockies Express may conduct full right-of-way topsoiling. Topsoil may be stored at either edge of the right-of-way, or in some cases spread over the working side of the right-of-way, but not intermixed with subsoil materials.

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Deleted: Depth of top cover is measured from the top of pipe and/or concrete or set on weights to the lowest shoulder of ditch after topsoil is stripped in accordance with Part 2 below. (See Figure 1)¶

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- C. During the clearing/grading phase, the Agricultural Inspector shall monitor site-specific depths of topsoil stripping. Where right-of-way construction requires cut-and-fill of the soil profile across grades, to the extent practicable, topsoil stockpiling will be located on the up slope edge of the right-of-way. Where topsoil cannot be separately stored on the up slope side, suitable right-of-way space will be provided on the down slope side to ensure the complete segregation of the topsoil from all cut-and-fill material.
- D. All subsoil material that is removed from the trench will be placed in a second windrow parallel to the pipeline trench that is separate from the topsoil windrow.
- E. In backfilling the trench, the stockpiled subsoil material will be placed back into the trench before replacing the topsoil.
- F. Refer to Items Nos. 5.A and 5.B for procedures pertaining to rock removal from the subsoil and topsoil.
- G. Refer to Items Nos. 7.A through 7.C for procedures pertaining to the alleviation of compaction of the topsoil.
- H. The topsoil must be replaced so that after settling occurs, the topsoil's original depth and contour will be restored. The same shall apply where excavations are made for road, stream, drainage ditch, or other crossings. In no instance will the topsoil materials be used for any other purpose.
- I. Surface drainage should not be blocked or hindered in any way. If excess spoil is encountered, it will be removed offsite to prevent ridging. Adding additional spoil to the crown over the trench in excess of that required for settlement will not be permitted.

**3. Repair of Damaged Drain Tile Lines**

All drain tile repair and/or replacement shall be completed prior to topsoil replacement.

If underground drain tile is damaged by the pipeline installation, it shall be repaired in a manner that assures the drain tile proper operating condition at the point of repair. If underground drain tile lines in the pipeline construction area are adversely affected by the pipeline construction, the Company will take such actions as are necessary to insure the proper functioning of the drain tile lines, including the relocation, reconfiguration, and replacement of the existing drain tile lines. The following standards and policies shall apply to the drain tile line repair:

- A. The Company shall make a conscientious effort to locate all drain tile lines within the right-of-way prior to the pipeline installation. The Company will contact the local county Soil and Water Conservation Districts and affected Landowners and/or Tenants for their knowledge of drain tile line locations prior to the pipeline installation.

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All identified drain tile lines will be marked with a highly visible lathe to alert construction crews to the need for drain tile line repairs.

- B. During construction drain tile lines that are damaged, cut, or removed shall be distinctly marked by placing a highly visible lathe in the trench spoil bank directly opposite each drain tile line. This marker shall not be removed until the drain tile line has been permanently repaired and such repairs have been approved and accepted by the Landowner and the Agricultural Inspector.
- C. All drain tile lines shall be repaired with materials of the same or better quality as that which was damaged. The repair plans shall be approved by the Agricultural Inspector. In Ohio, all repairs shall be done according to ODNR detail numbers 5 through 10.
- D. Where drain tile lines are severed by the pipeline trench steel channel iron, steel angle iron, full-round slotted steel pipe, half-round steel pipe, or schedule 80 pvc pipe with 1/8 inch diameter holes shall be used to support the drain tile lines across the trench.
  - 1. If the drain tile repairs involve clay or concrete tile, the support member shall extend to the first tile joint beyond the minimum 3-foot distance. If the drain tile repairs involve plastic pipe it shall be supported at a 90-degree angle from the bottom of the drain tile. This may involve using angle iron to provide proper support.
  - 2. There shall be a minimum of 12 inches of clearance between the drain tile line and the pipeline whether the pipeline passes over or under the tile line.
  - 3. In no instance shall the grade of the drain tile line be decreased.
- E. Before completing permanent drain tile repairs, all drain tile lines shall be examined by suitable means on both sides of the trench for their entire length within the right-of-way to check for drain tile that might have been damaged by construction equipment. If any drain tile line is found to be damaged, it shall be repaired so it will operate as well after construction as before construction began.
- F. Temporary repairs of drain tile lines shall be made as soon as exposed. This shall include the use of filter material to prevent the movement of soil into the drain tile line or the temporary plugging of the drain tile line until permanent repairs can be made.
- G. All permanent drain tile line repairs shall be made within 14 days following completion of the pipeline installation on any affected Landowner's property unless otherwise authorized by the Landowner, weather and soil conditions permitting. Landowners and/or tenants will be contacted prior to final backfill and restoration and offered opportunity to witness final tile line repair.
- H. Following completion of the pipeline, Rockies Express will be responsible for correcting all tile line repairs that fail due to pipeline construction, provided those repairs were made by Rockies Express. Rockies Express will not be responsible for drain tile line repairs that Rockies Express pays the landowner to perform. The plans for the repairs shall be approved by the Landowner prior beginning work on the

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repair.

**4. Correction of Future Drainage Problems**

Rockies Express shall be responsible for installing such additional drainage measures as are necessary to properly drain wet areas on the permanent and temporary easements caused by the construction and/or existence of the pipeline.

**5. Rock Removal**

The following rock removal procedures only pertain to rocks found in the uppermost 42 inches of soil.

- A. Before replacing any topsoil, all rocks greater than 3 inches in any dimension will be removed from the surface of all exposed subsoil (i.e. working side and subsoil storage areas); and the top 42 inches or the actual depth of top cover, whichever is less, within the pipeline trench, bore pits, or other excavations shall not contain rocks of any greater concentration or size than existed prior to the pipeline construction.
- B. All rocks greater than 3 inches in any dimension will be removed from the topsoil surface using a rock rake following final restoration unless undisturbed areas adjacent to the ROW can be shown to contain similar concentration and size.
- C. If trenching, blasting, or boring operations are required through rocky terrain, suitable precautions will be taken to minimize the potential for oversized rocks to become interspersed with adjacent soil material.
- D. Rocks and soil containing rocks removed from the subsoil areas, topsoil, or from any excavations, will be returned to the pre-existing contours, hauled off the landowner's premises or disposed of on the landowner's premises at a location that is mutually acceptable to the landowner and Rockies Express and in accordance with any applicable laws or regulations.

**6. Removal of Construction Debris**

All construction-related debris and material that are not an integral part of the pipeline will be removed from the landowner's property. Such material to be removed would include litter generated by the construction crews which will be removed on a daily basis.

**7. Compaction, Rutting, Fertilization, Liming**

- A. In all agricultural sections of the right-of-way that were traversed by vehicles and construction equipment, where topsoil is stripped and prior to topsoil replacement, the subsoil shall be fractured by deep ripping to a depth not to exceed 16 inches below the surface of the subsoil with the appropriate industrial ripper. Subsurface features (i.e. drain tiles, other utilities) may warrant less depth. The ripper shall have maximum teeth spacing of 16 inches. The ripping shall be performed parallel to the pipeline and at 90 degrees to the pipeline. Following the ripping operation all stone and rock material three (3) inches and larger in size which has been lifted to the surface shall be collected and removed from the site for disposal.

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Upon approval by the Agricultural Inspector of the subsoil decompaction and the stone removal, the topsoil that has been temporarily removed for the period of construction shall then be replaced. The soil profile in the full width of the right-of-way shall be shattered to a depth not to exceed 16 inches with a heavy-duty sub-soiling tool having angled legs. Stone removal shall be completed, as necessary, to eliminate any additional rocks and stones brought to the surface as a result of the final subsoil shattering process.

The existence of stumps, tile lines or underground utilities may necessitate less depth.

- B. The entire right-of-way will then be disked. Three passes will be made across any agricultural land that is ripped.
- C. Ripping and disking will be done at a time when the soil is dry enough for normal tillage operations to occur on undisturbed farmland adjacent to the areas to be ripped.
- D. Rockies Express will restore all compacted or rutted land as near as practicable to its original condition.
- D. The cost of applying fertilizer, manure, and/or lime will be included in the damages paid to the landowner, thereby allowing the landowner to apply the appropriate type and amounts of fertilizer, manure, and/or lime as needed depending on the crops contemplated and the construction schedule.

In Ohio, subsoil decompaction and topsoil replacement activities may have to be performed as weather permits due to the generally unsuitable weather for continuing agricultural land restoration in late autumn and winter. F. If there is a dispute between the landowner and Rockies Express as to what areas need to be ripped, the depth at which compacted areas should be ripped, or the necessity or rates of lime and fertilizer application, the appropriate county Soil and Water Conservation District's opinion will be considered by Rockies Express and the landowner.

8. Land Leveling

- A. Following the completion of the pipeline, Rockies Express will restore any right-of-way to its original pre-construction elevation and contour should uneven settling occur or surface drainage problems develop as a result of pipeline construction.
- B. Rockies Express will provide the landowners with a telephone number and address that may be used to alert Rockies Express of the need to perform additional land leveling services.
- C. If uneven settling occurs or surface drainage problems develop as a result of the pipeline construction, Rockies Express will provide land leveling services within 45 days of a landowner's written notice, weather and soil conditions permitting.
- D. If there is any dispute between the landowner and Rockies Express as to what areas

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need additional land leveling beyond that which is done at the time of construction, it will be Rockies Express's responsibility to disprove the landowner's claim that additional land leveling is warranted.

**9. Backfill Profile and Trench Crowning**

In all agricultural land areas, ripped or blasted bedrock or concentrated volumes of excavated stone or rock material may be used for trench backfill material, but no closer than 24 inches from the exposed working construction surface of the right-of-way. All rock not utilized as trench backfill material shall be removed from the right-of-way. The remaining backfill material shall consist of suitable subsoil material. Trench crowning shall occur during the trench backfilling operation using subsoil materials over the trench to allow for trench settling. In Ohio, this will be performed in accordance with ODNR detail number 13.

In areas where trench settling occurs after topsoil spreading, imported topsoil shall be used to fill each depression. Topsoil from the adjacent agricultural land shall not be used to fill the depressions.

In agricultural areas where the materials excavated during trenching are insufficient in quantity to meet backfill requirements, the soil of any agricultural land adjacent to the trench and construction zone shall not be used as either backfill or surface cover material. Under no circumstances shall any topsoil materials be used for pipe padding material or trench backfill. In situations where imported soil materials are employed for backfill on agricultural lands, such material shall be of similar texture and quality to the existing soils on site. Imported soils should be from similar soil types and free from noxious weeds and other pests to the extent possible.

**10. Prevention of Soil Erosion**

- A. Rockies Express will follow the guidelines described and approved in its Upland Construction Plan (REX Plan) and Wetland and Waterbody Construction and Mitigation Procedures (REX Procedures).
- B. Rockies Express will work with landowners to prevent excessive erosion on right-of-way that has been disturbed by construction. Reasonable methods will be implemented to control erosion. This is not a requirement, however, if the land where the pipeline is constructed is cropland, is not considered Highly Erodible Lands (HEL) by USDA standards, and that the landowner intends to leave bare until the next crop is planted.
- C. If the landowner and Rockies Express cannot agree upon a reasonable method to control erosion on the landowner's right-of-way, the recommendations of the appropriate county Soil and Water Conservation District and/or FERC will be considered by Rockies Express and the landowner.

**11. Repair of Damaged Soil Conservation Practices**

All soil conservation practices (such as spring developments and pipelines, terraces,

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grassed waterways, critical area seedings, etc.), which are damaged by the pipeline's construction, will be restored to their pre-construction condition. All wetland areas will be restored in accordance with the Rockies Express Procedures

**12. Control of Trench Washouts, Water Piping and Blowouts**

Trench breakers shall be installed for the dual purpose of preventing trench washouts during construction and abating water piping and blowouts subsequent to trench backfill. The distance between permanent trench breakers will be as described in Rockies Express's Upland Construction Plan and in Ohio meet the requirements as set forth in ODNR detail no.'s 11, 12, & 12A.. Rockies Express will record each installed trench breaker location, by map-referenced station-number.

**13. Damages to Private Property**

- A. Rockies Express will reasonably compensate landowners for any construction-related damages caused by Rockies Express that occur on or off of the established pipeline right-of-way.
- B. Compensation for damages to private property caused by Rockies Express shall extend beyond the initial construction of the pipeline, to include those damages caused by Rockies Express during future construction, operation, maintenance, and repairs relating to the pipeline.

**14. Clearing of Trees and Brush from the Easement**

- A. If trees are to be removed from the right-of-way, Rockies Express will consult with the landowner to determine if there are trees of commercial or other value to the landowner.
- B. If there are trees of commercial or other value to the landowner, Rockies Express will compensate the landowner at a fair market value for the trees as well as allow the landowner the right to retain ownership of the trees with the disposition of the trees to be negotiated prior to the commencement of land clearing.
- C. Rockies Express will identify black cherry trees located on the right-of-way near active livestock use areas during the construction plan development. Black cherry tree vegetation is toxic to livestock when wilted and shall not be stockpiled in areas accessible to livestock. During the clearing phase, such vegetation will be disposed of in a manner that prevents contact with livestock.
- D. Unless otherwise restricted by federal, state or local regulations, Rockies Express will follow the landowner's desires regarding the removal and disposal of trees, brush, and stumps of no value to the landowner by burning, burial, etc., or complete removal from any affected property.

**15. Interference with Irrigation Systems**

- A. If the pipeline and/or temporary work areas intersect an operational (or soon to be operational) spray irrigation system, Rockies Express will establish with the



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landowner an acceptable amount of time the irrigation system may be out of service.

- B. If, as a result of pipeline construction activities, an irrigation system interruption results in crop damages, either on the pipeline right-of-way or off the right-of-way, the landowner will be reasonably compensated for all such crop damages.
- C. If it is feasible and mutually acceptable to Rockies Express and the landowner, temporary measures will be implemented to allow an irrigation system to continue to operate across land on which the pipeline is also being constructed.

**16. Ingress and Egress Routes**

Prior to the pipeline's installation, Rockies Express and the landowner will reach a mutually acceptable agreement on the route that will be utilized for entering and leaving the pipeline right-of-way should access to the right-of-way not be practical or feasible from adjacent segments of the pipeline right-of-way, from public highway or railroad right-of-way or from other suitable public access.

Where access ramps/pads are required from the highway to the pipeline construction area, the topsoil shall be removed and stock piled for replacement, an underlayment of durable geotextile matting, or equivalent shall be placed over the exposed subsoil surface prior to the placement of temporary rock access fill material. All such material will be removed upon completion of the project. Complete removal of the ramp upon completion of the project and restoration of the impacted site is required prior to topsoil replacement.

**17. Temporary Roads**

- A. The location of temporary roads to be used for construction purposes will be negotiated with the landowner.
- B. The temporary roads will be designed to not impede surface drainage and will be built to minimize soil erosion on or near the temporary roads.
- C. Upon abandonment, temporary roads may be left intact through mutual agreement of the landowner and Rockies Express unless otherwise restricted by federal, state, or local regulations. If the temporary roads are to be removed, the right-of-way upon which the temporary roads are constructed will be returned to its previous use and restored to equivalent condition as existed prior to their construction.
- D. If the temporary roads are to be removed, the rights-of-way upon which the temporary roads are constructed will be returned to their previous use(s) and restored to equivalent condition(s) as existed prior to their construction. All temporary access roads that are removed shall be ripped to a depth not to exceed 16 inches. All ripping will be done consistent with Items 7.A. through 7.C.

**18. Weed Control**

- A. On any right-of-way over which Rockies Express has jurisdiction as to its surface use, (i.e., valve sites, metering stations, compression stations, etc.), Rockies

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Express will provide for weed control in a manner that prevents the spread of weeds onto adjacent lands used for agricultural purposes. Spraying will be done by a pesticide applicator that is appropriately licensed for doing such work in the state of Illinois.

- B. Rockies Express will be responsible for reimbursing all reasonable costs incurred by owners of land adjacent to surface facilities when the landowners must control weeds on their land which can be determined to have spread from land accommodating pipeline surface facilities, should Rockies Express fail to do so after being given written notice and a 45-day opportunity to respond.

**19. Pumping of Water from Open Trenches**

- A. No back filling shall be done in water filled trench. All freestanding water shall be removed prior to any back filling.
- A. In the event it becomes necessary to pump water from open trenches, Rockies Express will pump the water in a manner that will avoid damaging adjacent agricultural land, crops, and/or pasture. Such damages include, but are not limited to, the inundation of crops for more than 24 hours, the deposition of excessive sediment in ditches and other water courses, and the deposition of subsoil sediment and gravel in fields and pastures.
- B. If it is impossible to avoid water-related damages as described in Item 19.A. above, Rockies Express will reasonably compensate the landowners for the damages or will correct the damages so as to restore the land, crops, pasture, water courses, etc. to their pre-construction condition.
- C. All pumping of water shall comply with existing drainage laws, local ordinances relating to such activities, and provisions of the Clean Water Act.

**20. Aboveground Facilities**

Locations for aboveground facilities shall be selected in a manner so as to be as unobtrusive as reasonably possible to ongoing agricultural activities occurring on the land adjacent to the facilities. Aboveground facilities on the right-of-way will be located in a manner that attempts to minimize the loss of agricultural land first, and secondly, the impacts to other environmental features. If this is not feasible, such facilities shall be located so as to incur the least hindrance to the adjacent cropping operations (i.e., located in field corners or areas where at least one side is not used for cropping purposes).

**21. Advance Notice of Access to Private Property**

- A. Rockies Express will provide the landowner or tenant with a minimum of 24 hours prior notice before accessing his/her property for the purpose of constructing the pipeline.
- B. Prior notice shall first consist of a personal contact or a telephone contact, whereby the landowner or tenant is informed of Rockies Express's intent to access the land. If the landowner or tenant cannot be reached in person or by telephone, Rockies

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Express will mail or hand deliver to the landowner or tenant's home a dated, written notice of Rockies Express's intent. The landowner or tenant need not acknowledge receipt of the written notice before Rockies Express can enter the landowner's property.

**22. Reporting of Inferior Agricultural Impact Mitigation Work**

No later than 45 days prior to the commencement of the pipeline construction across a landowner's property, Rockies Express will provide the landowner with a toll-free number the landowner can call to alert Rockies Express should the landowners observe inferior agricultural impact mitigation work which is being done or has been carried out on his/her property.

**23. Indemnification**

Rockies Express will indemnify all owners of agricultural land upon which such pipeline is installed. This indemnification is made part of each easement agreement.

**24. General Monitoring and Remediation**

Rockies Express will provide a monitoring and remediation period of no less than three years immediately following the full-length activation of the pipeline or the completion of initial right-of-way restoration, whichever occurs last. The Company shall be responsible for the cost of the monitoring and remediation. The two-year period allows for the effects of climatic cycles such as frost action, precipitation and growing seasons to occur, from which various monitoring determinations can be made. The Company shall maintain an Agricultural Inspector on at least a part-time basis through this period. The monitoring and remediation phase shall be used to identify any remaining impacts associated with the pipeline construction that are in need of correction and to implement the follow-up restoration.

General right-of-way conditions to be monitored include topsoil thickness, relative content of rock and large stones, trench settling, crop production, drainage and repair of severed fences, etc. The problems or concerns shall be identified through on-site monitoring of all areas along the right-of-way and through contact with respective landowner/operator and local county Soil and Water Conservation District.

Topsoil deficiency and trench settling shall be restored with imported topsoil that is consistent with the quality of topsoil on the affected site. Excessive amounts of rock and oversized stone material shall be determined by a visual inspection of the right-of-way. Results shall be compared to portions of the same field located outside of the right-of-way. Included in the determination of relative rock and large stone content is the right-of-way's condition subsequent to tillage and the relative concentration of such materials within the right-of-way as compared to off the right-of-way. All excess rocks and large stones shall be removed and disposed of by the Company.

On site monitoring on agricultural lands shall be conducted at least three times during the growing season and shall include a comparison of growth and yield for crops on and off the right-of-way. When the subsequent crop productivity within the affected right-of-way is less than that of the adjacent unaffected agricultural land, the Agricultural

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*Inspector, in conjunction with the Company as well as other appropriate organizations, shall help to determine the appropriate rehabilitation measures for the Company to implement. During the various stages of the project, all affected farm operators shall be periodically apprised of the duration of remediation by their respective Agricultural Inspector. Because conditions that require remediation may not be noticeable at or shortly after the completion of construction, the signing of a release form prior to the end of the remediation period shall not relieve the Company's responsibility to fully redress all project impacts. After completion of the specific remediation period, the Company shall continue to respond to the reasonable requests of the landowner/operators to correct project related effects on the agricultural resources.*

*On lands subject to erosion, the Company shall patrol the pipeline right-of-way with reasonable frequency to detect erosion of the top cover. Whenever the loss of cover due to erosion creates a safety issue the Company shall take corrective action.*

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# INDIANA

## **ROCKIES EXPRESS PIPELINE - EAST PROJECT**

### **AGRICULTURAL IMPACT MITIGATION PLAN**

pertaining to the construction of a

### **42-inch NATURAL GAS PIPELINE AND RELATED APPURTENANCES**

in

**VERMILLION, PARKE, PUTNAM, HENDRICKS, MORGAN, JOHNSON, SHELBY, DECATUR  
AND FRANKLIN Counties in Indiana**

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The following pipeline Agricultural Impact Mitigation Plan (Plan) construction standards and policies are recommended to help preserve the integrity of any agricultural land that is impacted by pipeline construction. They were developed with the cooperation of agricultural agencies, organizations, landowners, tenants, drainage contractors, and pipeline companies.

The below prescribed construction standards and policies are applicable to construction activities occurring partially or wholly on privately owned agricultural land. With the exception of Item No. 3, they are not intended to apply to construction activities occurring entirely on public right-of-way, railroad right-of-way, publicly owned land, or privately owned land that is not agricultural land. The Company shall, however, adhere to the construction specifications relating to the repair of outlets for drain tile and/or surface drainage when they are encountered on lands owned or leased by others.

The standard and construction specifications are for mineral soils only and, therefore, do not pertain to organic muckland soils.

### **INTRODUCTION**

The Rockies Express Pipeline (Company) shall retain qualified Agricultural Inspectors on each work phase of the project. This shall include the initial construction plan development, the construction, the initial restoration, and the post-construction monitoring and follow-up restoration. The Agricultural Inspector shall act to assure that the provisions set forth in this document or in any separate agreement, will be adhered to in good faith by the Company and by the pipeline installation contractor, and that all agreements protect the resources of both the landowner and the Company.

The Agricultural Inspector shall assist with the collection and analyzing of site-specific agricultural information gathered for the construction plan development by the Company. This information shall be obtained through field review as well as direct contact with affected landowners and farm operators, local County Soil and Water Conservation District, Agricultural Extension Agents, and others. The Agricultural Inspector shall maintain contact with the appropriate on-site Project Inspectors throughout the construction phase. The Agricultural Inspector also shall maintain contact with the affected landowners and farm operators in conjunction with Company rights-of-way agents, as well local county Soil and Water Conservation District personnel concerning farm resources and management matters pertinent to the agricultural operations and the site-specific implementation of the construction plan. The Company shall provide a courtesy copy of information to the appropriate local County Soil and Water Conservation Districts at any time a request for a construction plan modification is submitted.

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The Company will employ Agricultural Inspectors that are at a minimum thoroughly familiar with the following:

Rockies Express Plan and Procedure  
Pipeline Construction Sequences and Process  
Trained in all aspects of soil and water conservation  
Familiar with farm operation  
Good oral and written communication skills  
Ability to work closely with the landowners and project sponsor

The Company will employ a minimum of one Agricultural Inspector per construction (installation) spread.

The Company shall encourage its pipeline contractor(s) to use, where and if available, local drain tile contractors to redesign, reconstruct, and/or repair any drain tile lines that are affected by the pipeline installation. Often the local contractors may have installed the Landowner's drain tile system and can have valuable knowledge as to the location, depth of cover, appurtenances, and any other factors affecting the tile operation. The drain tile contractor(s) shall follow the attached construction specifications.

The Company shall provide the Landowner a copy of that portion of the final plans that affect his property and any plans or maps that contain the information described below concerning agricultural areas and or uses.

Unless an easement specifically provides to the contrary, the actions specified in the pipeline standard and construction specifications attached to this Plan will be implemented in accordance with the conditions listed below:

- A. The Company shall provide a copy of this Plan to the Landowner and the Landowner can forward to their Tenant prior to obtaining an easement from said Landowner. Additionally, Rockies Express will provide a copy of this Plan to each of the Soil and Water Conservation Districts and Farm Bureau offices through which the pipeline traverses.
- B. All actions are subject to change by Landowners, provided such changes are negotiated in advance of construction and acceptable to the Company, FERC and any permitting agency. To satisfy FERC requirements, any modification to an action must provide an equal or greater level of environmental protection than the original action and may need the approval of FERC before it can be implemented.
- C. The Company may negotiate with Landowners to carry out the actions that Landowners wish to perform themselves, but shall not compensate the landowner for any measures carried out themselves until final inspection has been approved by the Company and at a minimum any measure carried out by a land owner has followed guidelines set forth in the Rockies Express Plan.
- D. All mitigative actions employed by Rockies Express, unless otherwise specified in these construction standards and policies or in an easement negotiated with a landowner, will be implemented within 45 days of completion of the pipeline facilities on any affected



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property, weather and landowner permitting. Temporary repairs will be made by Rockies Express during the construction process as needed to minimize the risk of additional property damage that may result from an extended construction time period. If weather delays the completion of any mitigative action beyond the 45 day period, Rockies Express will provide the affected landowner(s) with a written estimate of the time needed for completion of the mitigative action.

- E. Unless otherwise agreed to by Landowners all actions pursuant to this Plan shall extend to associated future construction, maintenance and repairs by the Company.
- F. After construction, Rockies Express will provide the Landowners with drawings showing the location by survey station of tile lines encountered in the construction of the pipeline. The drawings will include a depth measurement from existing ground and will be provided on a county-by-county basis to the SWCDs.
- G. The Company shall implement the actions contained in this Plan to the extent that they do not conflict with the requirements of any applicable federal, state and local rules and regulations and other permits and approvals that are obtained by the Company for the project. The provisions and requirements of this Plan shall be deemed to be included in all easements associated with agricultural lands unless the easement specifically provides to the contrary.
- H. Each action contained in this Plan shall be implemented to the extent that such action is not determined to be unenforceable by reason of the actions approved by, or other requirements, of the FERC Certificate issued for the project. The Company agrees to include this Plan as part of its submissions to FERC and hereby expressly agrees to the inclusion of the terms contained in this Plan in the Environmental Impact Statement to be issued in conjunction with the anticipated Certificate of Public Convenience and Necessity.
- I. Prior to the construction of the pipeline, the Company shall provide each Landowner and Tenant with a telephone number and address which can be used to contact the Company, both during and following the completion of construction, regarding the work that was performed on their property or any other construction-related matter. The Company shall respond promptly to Landowner and Tenant telephone calls and correspondence.
- J. Certain provisions of this Plan require the Company to consult or agree with the Landowner and Tenant(s) of a property. The Company shall engage in a good faith effort to secure the agreement of both Landowner and Tenant in such cases. In the event of a disagreement between Landowner and Tenant, the Company's obligation under this Plan shall be satisfied by securing the Landowner's agreement. Legal documents executed between the Landowner and Tenant will be part of the acquisition.
- K. If any provision of this Plan is held to be unenforceable, no other provision shall be affected by that holding, and the remainder of the Plan shall be interpreted as if it did not contain the unenforceable provision.

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- L. A local forester shall be hired by the Company to appraise the merchantable value of any timber to be cut for construction of the pipeline. The Landowner shall be compensated 100 percent of the value.

**Definitions**

Agricultural Land

Land which is presently under cultivation; land which has been previously cultivated and not subsequently developed for non-agricultural use; and cleared land which is capable of being cultivated. It includes land used for cropland, hay land, improved pastureland, truck gardens, farmsteads, commercial agricultural related facilities, feedlots, livestock confinement systems, land on which farm buildings within 100 feet of the pipeline are located, and land in government set-aside programs.

Best Management Practice (BMP)

Any structural, vegetative or managerial practice used to treat, prevent or reduce soil erosion. Such practices may include temporary seeding of exposed soils, construction of retention basins for storm water control and scheduling the implementation of all BMP's to maximize their effectiveness.

Company

Rockies Express Pipeline LLC, hereafter referred to as "Rockies Express", utility company, and any contractor or sub-contractor in the employ of Rockies Express for the purpose of completing the pipeline or any mitigative actions contained herein it's successors, and assigns, on its own behalf and as operator of the Company.

Cropland

Land used for growing row crops, small grains, or hay; includes land which was formerly used as cropland, but is currently in a government set-aside program and pastureland that was formerly utilized as cropland or is comprised of prime farmland.

Drain Tile

*Any artificial subsurface drainage system including: clay and concrete tile, vitrified sewer tile, corrugated plastic tubing, and stone drains.*

Landowner

Person(s) holding legal title to property on the pipeline route from whom Rockies Express is seeking, or has obtained, a temporary or permanent easement, or any person(s) legally authorized by a landowner to make

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decisions regarding the mitigation or restoration of agricultural impacts to such landowner's property.

Non-Agricultural Land

Any land that is not "Agricultural Land" as defined above.

Pipeline

The pipeline and its related appurtenances described in the Company's application to the Federal Energy Regulatory Commission for a Certificate of Public Convenience and Necessity.

Prime farmland

Agricultural land comprised of soils that are defined by the USDA Natural Resources Conservation Service as being "prime" soils (generally considered the most productive soils with the least input of nutrients and management).

Right-of-way

Includes the permanent and temporary easements that Rockies Express acquires for the purpose of constructing and operating the pipeline.

Surface Drains

Any surface drainage system such as shallow surface field drains, grassed waterways, open ditches, or any other conveyance of surface water.

Tenant

Any person lawfully residing on or in possession of the land.

Topsoil

The upper most part of the soil commonly referred to as the plow layer, the A layer, or the A horizon, or its equivalent in uncultivated soils. It is the surface layer of the soil that has the darkest color or the highest content of organic matter (as identified in the USDA County Soil Survey and verified w/ right-of-way samples).

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**Construction Standards and Policies**

**1. Pipeline depth**

A. Except for aboveground piping facilities, such as mainline block valves, tap valves, meter stations, etc., the pipeline will be buried with:

1. a minimum of ~~4~~ feet of top cover where it crosses cropland.
2. a minimum of ~~4 feet of top cover~~ where it crosses pasture land or other agricultural land comprised of soils that are classified by the USDA as being prime soils.
3. a minimum of 3 feet of top cover where it crosses pasture land and other agricultural land not comprised of prime soils.
4. a minimum of 3 feet of top cover where it crosses wooded/brushy land.
5. substantially the same top cover as an existing parallel pipeline, but not less than 3 feet, where the route parallels an existing pipeline within a 100 foot perpendicular offset.
6. A minimum of 60 inches of cover shall be maintained over the top of the pipeline where it crosses surface drains, diversions, grassed waterways, open ditches, and streams.

B. Notwithstanding the foregoing, in those areas where (i) rock in its natural formation and/or (ii) a continuous strata of gravel exceeding 200 feet in length are encountered, the minimum depth of cover will be 24 inches.

C. On agricultural land subject to erosion, Rockies Express will patrol the pipeline right-of-way with reasonable frequency to detect areas of erosion of the top cover. In no instance will Rockies Express knowingly allow the depth of top cover to be less than 3 feet, except as stated in 1.C. above.

**2. Soil Removal and Replacement**

A. The topsoil shall be determined by a properly qualified agricultural inspector, soil scientist or soil technician who will set stakes or flags every 200 feet along the right-of-way identifying the depth of topsoil to be removed. As an alternative to staking or flagging, the Company may depict topsoil depths on alignment sheets based on published county-level soil survey information, if approved by the landowner.

B. At a minimum, the actual depth of the topsoil, not to exceed 16 inches, will first be stripped from the area to be excavated above the pipeline and the subsoil storage area. The topsoil will be stored in a windrow parallel to the pipeline trench in such a manner that it will not become intermixed with subsoil materials. Rockies Express may conduct full right-of-way topsoiling. Topsoil may be stored at either edge of the right-of-way, or in some cases spread over the working side of the right-of-way, but not intermixed with subsoil materials.

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- C. During the clearing/grading phase, the Agricultural Inspector shall monitor site-specific depths of topsoil stripping. Where right-of-way construction requires cut-and-fill of the soil profile across grades, to the extent practicable, topsoil stockpiling will be located on the up slope edge of the right-of-way. Where topsoil cannot be separately stored on the up slope side, suitable right-of-way space will be provided on the down slope side to ensure the complete segregation of the topsoil from all cut-and-fill material.
- D. All subsoil material that is removed from the trench will be placed in a second windrow parallel to the pipeline trench that is separate from the topsoil windrow.
- E. In backfilling the trench, the stockpiled subsoil material will be placed back into the trench before replacing the topsoil.
- F. Refer to Items Nos. 5.A and 5.B for procedures pertaining to rock removal from the subsoil and topsoil.
- G. Refer to Items Nos. 7.A through 7.C for procedures pertaining to the alleviation of compaction of the topsoil.
- H. The topsoil must be replaced so that after settling occurs, the topsoil's original depth and contour will be restored. The same shall apply where excavations are made for road, stream, drainage ditch, or other crossings. In no instance will the topsoil materials be used for any other purpose.
- I. Surface drainage should not be blocked or hindered in any way. If excess spoil is encountered, it will be removed offsite to prevent ridging. Adding additional spoil to the crown over the trench in excess of that required for settlement will not be permitted.

**3. Repair of Damaged Drain Tile Lines**

All drain tile repair and/or replacement shall be completed prior to topsoil replacement.

If underground drain tile is damaged by the pipeline installation, it shall be repaired in a manner that assures the drain tile proper operating condition at the point of repair. If underground drain tile lines in the pipeline construction area are adversely affected by the pipeline construction, the Company will take such actions as are necessary to insure the proper functioning of the drain tile lines, including the relocation, reconfiguration, and replacement of the existing drain tile lines. The following standards and policies shall apply to the drain tile line repair:

- A. The Company shall make a conscientious effort to locate all drain tile lines within the right-of-way prior to the pipeline installation. The Company will contact the local county Soil and Water Conservation Districts and affected Landowners and/or Tenants for their knowledge of drain tile line locations prior to the pipeline installation.

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All identified drain tile lines will be marked with a highly visible lathe to alert construction crews to the need for drain tile line repairs.

- B. During construction drain tile lines that are damaged, cut, or removed shall be distinctly marked by placing a highly visible lathe in the trench spoil bank directly opposite each drain tile line. This marker shall not be removed until the drain tile line has been permanently repaired and such repairs have been approved and accepted by the Landowner and the Agricultural Inspector.
- C. All drain tile lines shall be repaired with materials of the same or better quality as that which was damaged. The repair plans shall be approved by the Agricultural Inspector. In Ohio, all repairs shall be done according to ODNR detail numbers 5 through 10.
- D. Where drain tile lines are severed by the pipeline trench steel channel iron, steel angle iron, full-round slotted steel pipe, half-round steel pipe, or schedule 80 pvc pipe with 1/8 inch diameter holes shall be used to support the drain tile lines across the trench.
  - 1. If the drain tile repairs involve clay or concrete tile, the support member shall extend to the first tile joint beyond the minimum 3-foot distance. If the drain tile repairs involve plastic pipe it shall be supported at a 90-degree angle from the bottom of the drain tile. This may involve using angle iron to provide proper support.
  - 2. There shall be a minimum of 12 inches of clearance between the drain tile line and the pipeline whether the pipeline passes over or under the tile line.
  - 3. In no instance shall the grade of the drain tile line be decreased.
- E. Before completing permanent drain tile repairs, all drain tile lines shall be examined by suitable means on both sides of the trench for their entire length within the right-of-way to check for drain tile that might have been damaged by construction equipment. If any drain tile line is found to be damaged, it shall be repaired so it will operate as well after construction as before construction began.
- F. Temporary repairs of drain tile lines shall be made as soon as exposed. This shall include the use of filter material to prevent the movement of soil into the drain tile line or the temporary plugging of the drain tile line until permanent repairs can be made.
- G. All permanent drain tile line repairs shall be made within 14 days following completion of the pipeline installation on any affected Landowner's property unless otherwise authorized by the Landowner, weather and soil conditions permitting. Landowners and/or tenants will be contacted prior to final backfill and restoration and offered opportunity to witness final tile line repair.
- H. Following completion of the pipeline, Rockies Express will be responsible for correcting all tile line repairs that fail due to pipeline construction, provided those repairs were made by Rockies Express. Rockies Express will not be responsible for drain tile line repairs that Rockies Express pays the landowner to perform. The plans for the repairs shall be approved by the Landowner prior beginning work on the

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repair.

**4. Correction of Future Drainage Problems**

Rockies Express shall be responsible for installing such additional drainage measures as are necessary to properly drain wet areas on the permanent and temporary easements caused by the construction and/or existence of the pipeline.

**5. Rock Removal**

The following rock removal procedures only pertain to rocks found in the uppermost 42 inches of soil.

- A. Before replacing any topsoil, all rocks greater than 3 inches in any dimension will be removed from the surface of all exposed subsoil (i.e. working side and subsoil storage areas); and the top 42 inches or the actual depth of top cover, whichever is less, within the pipeline trench, bore pits, or other excavations shall not contain rocks of any greater concentration or size than existed prior to the pipeline construction.
- B. All rocks greater than 3 inches in any dimension will be removed from the topsoil surface using a rock rake following final restoration unless undisturbed areas adjacent to the ROW can be shown to contain similar concentration and size.
- C. If trenching, blasting, or boring operations are required through rocky terrain, suitable precautions will be taken to minimize the potential for oversized rocks to become interspersed with adjacent soil material.
- D. Rocks and soil containing rocks removed from the subsoil areas, topsoil, or from any excavations, will be returned to the pre-existing contours, hauled off the landowner's premises or disposed of on the landowner's premises at a location that is mutually acceptable to the landowner and Rockies Express and in accordance with any applicable laws or regulations.

**6. Removal of Construction Debris**

All construction-related debris and material that are not an integral part of the pipeline will be removed from the landowner's property. Such material to be removed would include litter generated by the construction crews which will be removed on a daily basis.

**7. Compaction, Rutting, Fertilization, Liming**

- A. In all agricultural sections of the right-of-way that were traversed by vehicles and construction equipment, where topsoil is stripped and prior to topsoil replacement, the subsoil shall be fractured by deep ripping to a depth not to exceed 18 inches below the surface of the subsoil with the appropriate industrial ripper. Subsurface features (i.e. drain tiles, other utilities) may warrant less depth. The ripper shall have maximum teeth spacing of 18 inches. The ripping shall be performed parallel to the pipeline and at 90 degrees to the pipeline. Following the ripping operation all stone and rock material three (3) inches and larger in size which has been lifted to the surface shall be collected and removed from the site for disposal.

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Upon approval by the Agricultural Inspector of the subsoil decompaction and the stone removal, the topsoil that has been temporarily removed for the period of construction shall then be replaced. The soil profile in the full width of the right-of-way shall be shattered to a depth not to exceed 16 inches with a heavy-duty sub-soiling tool having angled legs. Stone removal shall be completed, as necessary, to eliminate any additional rocks and stones brought to the surface as a result of the final subsoil shattering process.

The existence of stumps, tile lines or underground utilities may necessitate less depth.

- B. The entire right-of-way will then be disked. Three passes will be made across any agricultural land that is ripped.
- C. Ripping and disking will be done at a time when the soil is dry enough for normal tillage operations to occur on undisturbed farmland adjacent to the areas to be ripped.
- D. Rockies Express will restore all compacted or rutted land as near as practicable to its original condition.
- D. The cost of applying fertilizer, manure, and/or lime will be included in the damages paid to the landowner, thereby allowing the landowner to apply the appropriate type and amounts of fertilizer, manure, and/or lime as needed depending on the crops contemplated and the construction schedule.

In Ohio, subsoil decompaction and topsoil replacement activities may have to be performed as weather permits due to the generally unsuitable weather for continuing agricultural land restoration in late autumn and winter. F. If there is a dispute between the landowner and Rockies Express as to what areas need to be ripped, the depth at which compacted areas should be ripped, or the necessity or rates of lime and fertilizer application, the appropriate county Soil and Water Conservation District's opinion will be considered by Rockies Express and the landowner.

8. Land Leveling

- A. Following the completion of the pipeline, Rockies Express will restore any right-of-way to its original pre-construction elevation and contour should uneven settling occur or surface drainage problems develop as a result of pipeline construction.
- B. Rockies Express will provide the landowners with a telephone number and address that may be used to alert Rockies Express of the need to perform additional land leveling services.
- C. If uneven settling occurs or surface drainage problems develop as a result of the pipeline construction, Rockies Express will provide land leveling services within 45 days of a landowner's written notice, weather and soil conditions permitting.
- D. If there is any dispute between the landowner and Rockies Express as to what areas



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need additional land leveling beyond that which is done at the time of construction, it will be Rockies Express's responsibility to disprove the landowner's claim that additional land leveling is warranted.

**9. Backfill Profile and Trench Crowning**

In all agricultural land areas, ripped or blasted bedrock or concentrated volumes of excavated stone or rock material may be used for trench backfill material, but no closer than 24 inches from the exposed working construction surface of the right-of-way. All rock not utilized as trench backfill material shall be removed from the right-of-way. The remaining backfill material shall consist of suitable subsoil material. Trench crowning shall occur during the trench backfilling operation using subsoil materials over the trench to allow for trench settling. In Ohio, this will be performed in accordance with ODNR detail number 13.

In areas where trench settling occurs after topsoil spreading, imported topsoil shall be used to fill each depression. Topsoil from the adjacent agricultural land shall not be used to fill the depressions.

In agricultural areas where the materials excavated during trenching are insufficient in quantity to meet backfill requirements, the soil of any agricultural land adjacent to the trench and construction zone shall not be used as either backfill or surface cover material. Under no circumstances shall any topsoil materials be used for pipe padding material or trench backfill. In situations where imported soil materials are employed for backfill on agricultural lands, such material shall be of similar texture and quality to the existing soils on site. Imported soils should be from similar soil types and free from noxious weeds and other pests to the extent possible.

**10. Prevention of Soil Erosion**

- A. Rockies Express will follow the guidelines described and approved in its Upland Construction Plan (REX Plan) and Wetland and Waterbody Construction and Mitigation Procedures (REX Procedures).
- B. Rockies Express will work with landowners to prevent excessive erosion on right-of-way that has been disturbed by construction. Reasonable methods will be implemented to control erosion. This is not a requirement, however, if the land where the pipeline is constructed is cropland, is not considered Highly Erodible Lands (HEL) by USDA standards, and that the landowner intends to leave bare until the next crop is planted.
- C. If the landowner and Rockies Express cannot agree upon a reasonable method to control erosion on the landowner's right-of-way, the recommendations of the appropriate county Soil and Water Conservation District and/or FERC will be considered by Rockies Express and the landowner.

**11. Repair of Damaged Soil Conservation Practices**

All soil conservation practices (such as spring developments and pipelines, terraces,

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grassed waterways, critical area seedings, etc.), which are damaged by the pipeline's construction, will be restored to their pre-construction condition. All wetland areas will be restored in accordance with the Rockies Express Procedures

**12. Control of Trench Washouts, Water Piping and Blowouts**

Trench breakers shall be installed for the dual purpose of preventing trench washouts during construction and abating water piping and blowouts subsequent to trench backfill. The distance between permanent trench breakers will be as described in Rockies Express's Upland Construction Plan and in Ohio meet the requirements as set forth in ODNR detail no.'s 11, 12, & 12A.. Rockies Express will record each installed trench breaker location, by map-referenced station-number.

**13. Damages to Private Property**

- A. Rockies Express will reasonably compensate landowners for any construction-related damages caused by Rockies Express that occur on or off of the established pipeline right-of-way.
- B. Compensation for damages to private property caused by Rockies Express shall extend beyond the initial construction of the pipeline, to include those damages caused by Rockies Express during future construction, operation, maintenance, and repairs relating to the pipeline.

**14. Clearing of Trees and Brush from the Easement**

- A. If trees are to be removed from the right-of-way, Rockies Express will consult with the landowner to determine if there are trees of commercial or other value to the landowner.
- B. If there are trees of commercial or other value to the landowner, Rockies Express will compensate the landowner at a fair market value for the trees as well as allow the landowner the right to retain ownership of the trees with the disposition of the trees to be negotiated prior to the commencement of land clearing.
- C. Rockies Express will identify black cherry trees located on the right-of-way near active livestock use areas during the construction plan development. Black cherry tree vegetation is toxic to livestock when wilted and shall not be stockpiled in areas accessible to livestock. During the clearing phase, such vegetation will be disposed of in a manner that prevents contact with livestock.
- D. Unless otherwise restricted by federal, state or local regulations, Rockies Express will follow the landowner's desires regarding the removal and disposal of trees, brush, and stumps of no value to the landowner by burning, burial, etc., or complete removal from any affected property.

**15. Interference with Irrigation Systems**

- A. If the pipeline and/or temporary work areas intersect an operational (or soon to be operational) spray irrigation system, Rockies Express will establish with the

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landowner an acceptable amount of time the irrigation system may be out of service.

- B. If, as a result of pipeline construction activities, an irrigation system interruption results in crop damages, either on the pipeline right-of-way or off the right-of-way, the landowner will be reasonably compensated for all such crop damages.
- C. If it is feasible and mutually acceptable to Rockies Express and the landowner, temporary measures will be implemented to allow an irrigation system to continue to operate across land on which the pipeline is also being constructed.

**16. Ingress and Egress Routes**

Prior to the pipeline's installation, Rockies Express and the landowner will reach a mutually acceptable agreement on the route that will be utilized for entering and leaving the pipeline right-of-way should access to the right-of-way not be practical or feasible from adjacent segments of the pipeline right-of-way; from public highway or railroad right-of-way or from other suitable public access.

Where access ramps/pads are required from the highway to the pipeline construction area, the topsoil shall be removed and stock piled for replacement, an underlayment of durable geotextile matting, or equivalent shall be placed over the exposed subsoil surface prior to the placement of temporary rock access fill material. All such material will be removed upon completion of the project. Complete removal of the ramp upon completion of the project and restoration of the impacted site is required prior to topsoil replacement.

**17. Temporary Roads**

- A. The location of temporary roads to be used for construction purposes will be negotiated with the landowner.
- B. The temporary roads will be designed to not impede surface drainage and will be built to minimize soil erosion on or near the temporary roads.
- C. Upon abandonment, temporary roads may be left intact through mutual agreement of the landowner and Rockies Express unless otherwise restricted by federal, state, or local regulations. If the temporary roads are to be removed, the right-of-way upon which the temporary roads are constructed will be returned to its previous use and restored to equivalent condition as existed prior to their construction.
- D. If the temporary roads are to be removed, the rights-of-way upon which the temporary roads are constructed will be returned to their previous use(s) and restored to equivalent condition(s) as existed prior to their construction. All temporary access roads that are removed shall be ripped to a depth not to exceed 16 inches. All ripping will be done consistent with Items 7.A. through 7.C.

**18. Weed Control**

- A. On any right-of-way over which Rockies Express has jurisdiction as to its surface use, (i.e., valve sites, metering stations, compression stations, etc.), Rockies

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Express will provide for weed control in a manner that prevents the spread of weeds onto adjacent lands used for agricultural purposes. Spraying will be done by a pesticide applicator that is appropriately licensed for doing such work in the state of Illinois.

- B. Rockies Express will be responsible for reimbursing all reasonable costs incurred by owners of land adjacent to surface facilities when the landowners must control weeds on their land which can be determined to have spread from land accommodating pipeline surface facilities, should Rockies Express fail to do so after being given written notice and a 45-day opportunity to respond.

**19. Pumping of Water from Open Trenches**

- A. No back filling shall be done in water filled trench. All freestanding water shall be removed prior to any back filling.
- A. In the event it becomes necessary to pump water from open trenches, Rockies Express will pump the water in a manner that will avoid damaging adjacent agricultural land, crops, and/or pasture. Such damages include, but are not limited to, the inundation of crops for more than 24 hours, the deposition of excessive sediment in ditches and other water courses, and the deposition of subsoil sediment and gravel in fields and pastures.
- B. If it is impossible to avoid water-related damages as described in Item 19.A. above, Rockies Express will reasonably compensate the landowners for the damages or will correct the damages so as to restore the land, crops, pasture, water courses, etc. to their pre-construction condition.
- C. All pumping of water shall comply with existing drainage laws, local ordinances relating to such activities, and provisions of the Clean Water Act.

**20. Aboveground Facilities**

Locations for aboveground facilities shall be selected in a manner so as to be as unobtrusive as reasonably possible to ongoing agricultural activities occurring on the land adjacent to the facilities. Aboveground facilities on the right-of-way will be located in a manner that attempts to minimize the loss of agricultural land first, and secondly, the impacts to other environmental features. If this is not feasible, such facilities shall be located so as to incur the least hindrance to the adjacent cropping operations (i.e., located in field corners or areas where at least one side is not used for cropping purposes).

**21. Advance Notice of Access to Private Property**

- A. Rockies Express will provide the landowner or tenant with a minimum of 24 hours prior notice before accessing his/her property for the purpose of constructing the pipeline.
- B. Prior notice shall first consist of a personal contact or a telephone contact, whereby the landowner or tenant is informed of Rockies Express's intent to access the land. If the landowner or tenant cannot be reached in person or by telephone, Rockies

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Express will mail or hand deliver to the landowner or tenant's home a dated, written notice of Rockies Express's intent. The landowner or tenant need not acknowledge receipt of the written notice before Rockies Express can enter the landowner's property.

**22. Reporting of Inferior Agricultural Impact Mitigation Work**

No later than 45 days prior to the commencement of the pipeline construction across a landowner's property, Rockies Express will provide the landowner with a toll-free number the landowner can call to alert Rockies Express should the landowners observe inferior agricultural impact mitigation work which is being done or has been carried out on his/her property.

**23. Indemnification**

Rockies Express will indemnify all owners of agricultural land upon which such pipeline is installed. This indemnification is made part of each easement agreement.

**24. General Monitoring and Remediation**

Rockies Express will provide a monitoring and remediation period of no less than three years immediately following the full-length activation of the pipeline or the completion of initial right-of-way restoration, whichever occurs last. The Company shall be responsible for the cost of the monitoring and remediation. The two-year period allows for the effects of climatic cycles such as frost action, precipitation and growing seasons to occur, from which various monitoring determinations can be made. The Company shall maintain an Agricultural Inspector on at least a part-time basis through this period. The monitoring and remediation phase shall be used to identify any remaining impacts associated with the pipeline construction that are in need of correction and to implement the follow-up restoration.

General right-of-way conditions to be monitored include topsoil thickness, relative content of rock and large stones, trench settling, crop production, drainage and repair of severed fences, etc. The problems or concerns shall be identified through on-site monitoring of all areas along the right-of-way and through contact with respective landowner/operator and local county Soil and Water Conservation District.

Topsoil deficiency and trench settling shall be restored with imported topsoil that is consistent with the quality of topsoil on the affected site. Excessive amounts of rock and oversized stone material shall be determined by a visual inspection of the right-of-way. Results shall be compared to portions of the same field located outside of the right-of-way. Included in the determination of relative rock and large stone content is the right-of-way's condition subsequent to tillage and the relative concentration of such materials within the right-of-way as compared to off the right-of-way. All excess rocks and large stones shall be removed and disposed of by the Company.

On site monitoring on agricultural lands shall be conducted at least three times during the growing season and shall include a comparison of growth and yield for crops on and off the right-of-way. When the subsequent crop productivity within the affected right-of-way is less than that of the adjacent unaffected agricultural land, the Agricultural

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Inspector, in conjunction with the Company as well as other appropriate organizations, shall help to determine the appropriate rehabilitation measures for the Company to implement. During the various stages of the project, all affected farm operators shall be periodically apprised of the duration of remediation by their respective Agricultural Inspector. Because conditions that require remediation may not be noticeable at or shortly after the completion of construction, the signing of a release form prior to the end of the remediation period shall not relieve the Company's responsibility to fully redress all project impacts. After completion of the specific remediation period, the Company shall continue to respond to the reasonable requests of the landowner/operators to correct project related effects on the agricultural resources.

On lands subject to erosion, the Company shall patrol the pipeline right-of-way with reasonable frequency to detect erosion of the top cover. Whenever the loss of cover due to erosion creates a safety issue the Company shall take corrective action.

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**OHIO**



**ROCKIES EXPRESS PIPELINE – EAST PROJECT**

**AGRICULTURAL IMPACT MITIGATION PLAN  
pertaining to the construction of a  
42-inch NATURAL GAS PIPELINE AND RELATED APPURTENANCES**

**in  
BUTLER, WARREN, CLINTON, GREENE, FAYETTE,  
PICKWAY, FAIRFIELD, PERRY, MORGAN, MUSKINGUM,  
GUERNSEY, NOBLE, BELMONT, AND MONROE  
COUNTIES in OHIO**

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The following pipeline Agricultural Impact Mitigation Plan (Plan) construction standards and policies are recommended to help preserve the integrity of any agricultural land that is impacted by pipeline construction. They were developed with the cooperation of agricultural agencies, organizations, landowners, tenants, drainage contractors, and pipeline companies.

The below prescribed construction standards and policies are applicable to construction activities occurring partially or wholly on privately owned agricultural land. With the exception of Item No. 3, they are not intended to apply to construction activities occurring entirely on public right-of-way, railroad right-of-way, publicly owned land, or privately owned land that is not agricultural land. The Company shall, however, adhere to the construction specifications relating to the repair of outlets for drain tile and/or surface drainage when they are encountered on lands owned or leased by others.

The standard and construction specifications are for mineral soils only and, therefore; do not pertain to organic muckland soils.

**INTRODUCTION**

The Rockies Express Pipeline (Company) shall retain qualified Agricultural Inspectors on each work phase of the project. This shall include the initial construction plan development, the construction, the initial restoration, and the post-construction monitoring and follow-up restoration. The Agricultural Inspector shall act to assure that the provisions set forth in this document or in any separate agreement, will be adhered to in good faith by the Company and by the pipeline installation contractor, and that all agreements protect the resources of both the landowner and the Company.

The Agricultural Inspector shall assist with the collection and analyzing of site-specific agricultural information gathered for the construction plan development by the Company. This information shall be obtained through field review as well as direct contact with affected landowners and farm operators, local County Soil and Water Conservation District, Agricultural Extension Agents, and others. The Agricultural Inspector shall maintain contact with the appropriate on-site Project Inspectors throughout the construction phase. The Agricultural Inspector also shall maintain contact with the affected landowners and farm operators in conjunction with Company rights-of-way agents, as well local county Soil and Water Conservation District personnel concerning farm resources and management matters pertinent to the agricultural operations and the site-specific implementation of the construction plan. The Company shall provide a courtesy copy of information to the appropriate local County Soil and

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Water Conservation Districts at any time a request for a construction plan modification is submitted.

The Company will employ Agricultural Inspectors that are at a minimum thoroughly familiar with the following:

Rockies Express Plan and Procedure  
Pipeline Construction Sequences and Process  
Trained in all aspects of soil and water conservation  
Familiar with farm operation  
Good oral and written communication skills  
Ability to work closely with the landowners and project sponsor

The Company will employ a minimum of one Agricultural Inspector per construction (Installation) spread.

The Company shall encourage its pipeline contractor(s) to use, where and if available, local drain tile contractors to redesign, reconstruct, and/or repair any drain tile lines that are affected by the pipeline installation. Often the local contractors may have installed the Landowner's drain tile system and can have valuable knowledge as to the location, depth of cover, appurtenances, and any other factors affecting the tile operation. The drain tile contractor(s) shall follow the attached construction specifications.

The Company shall provide the Landowner a copy of that portion of the final plans that affect his property and any plans or maps that contain the information described below concerning agricultural areas and or uses.

Unless an easement specifically provides to the contrary, the actions specified in the pipeline standard and construction specifications attached to this Plan will be implemented in accordance with the conditions listed below:

- A. The Company shall provide a copy of this Plan to the Landowner and the Landowner can forward to their Tenant prior to obtaining an easement from said Landowner. Additionally, Rockies Express will provide a copy of this Plan to each of the Soil and Water Conservation Districts and Farm Bureau offices through which the pipeline traverses.
- B. All actions are subject to change by Landowners, provided such changes are negotiated in advance of construction and acceptable to the Company, FERC and any permitting agency. To satisfy FERC requirements, any modification to an action must provide an equal or greater level of environmental protection than the original action and may need the approval of FERC before it can be implemented.
- C. The Company may negotiate with Landowners to carry out the actions that Landowners wish to perform themselves, but shall not compensate the landowner for any measures carried out themselves until final inspection has been approved by the Company and at a minimum any measure carried out by a land owner has followed guidelines set forth in the Rockies Express Plan.

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- D. All mitigative actions employed by Rockies Express, unless otherwise specified in these construction standards and policies or in an easement negotiated with a landowner, will be implemented within 45 days of completion of the pipeline facilities on any affected property, weather and landowner permitting. Temporary repairs will be made by Rockies Express during the construction process as needed to minimize the risk of additional property damage that may result from an extended construction time period. If weather delays the completion of any mitigative action beyond the 45 day period, Rockies Express will provide the affected landowner(s) with a written estimate of the time needed for completion of the mitigative action.
- E. Unless otherwise agreed to by Landowners all actions pursuant to this Plan shall extend to associated future construction, maintenance and repairs by the Company.
- F. After construction, Rockies Express will provide the Landowners with drawings showing the location by survey station of tile lines encountered in the construction of the pipeline. The drawings will include a depth measurement from existing ground and will be provided on a county-by-county basis to the SWCDs.
- G. The Company shall implement the actions contained in this Plan to the extent that they do not conflict with the requirements of any applicable federal, state and local rules and regulations and other permits and approvals that are obtained by the Company for the project. The provisions and requirements of this Plan shall be deemed to be included in all easements associated with agricultural lands unless the easement specifically provides to the contrary.
- H. Each action contained in this Plan shall be implemented to the extent that such action is not determined to be unenforceable by reason of the actions approved by, or other requirements, of the FERC Certificate issued for the project. The Company agrees to include this Plan as part of its submissions to FERC and hereby expressly agrees to the inclusion of the terms contained in this Plan in the Environmental Impact Statement to be issued in conjunction with the anticipated Certificate of Public Convenience and Necessity.
- I. Prior to the construction of the pipeline, the Company shall provide each Landowner and Tenant with a telephone number and address which can be used to contact the Company, both during and following the completion of construction, regarding the work that was performed on their property or any other construction-related matter. The Company shall respond promptly to Landowner and Tenant telephone calls and correspondence.
- J. Certain provisions of this Plan require the Company to consult or agree with the Landowner and Tenant(s) of a property. The Company shall engage in a good faith effort to secure the agreement of both Landowner and Tenant in such cases. In the event of a disagreement between Landowner and Tenant, the Company's obligation under this Plan shall be satisfied by securing the Landowner's agreement. Legal documents executed between the Landowner and Tenant will be part of the acquisition.
- K. If any provision of this Plan is held to be unenforceable, no other provision shall be affected by that holding, and the remainder of the Plan shall be interpreted as if it did not contain the unenforceable provision.

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- L. A local forester shall be hired by the Company to appraise the merchantable value of any timber to be cut for construction of the pipeline. The Landowner shall be compensated 100 percent of the value.

**Definitions**

**Agricultural Land**

Land which is presently under cultivation; land which has been previously cultivated and not subsequently developed for non-agricultural use; and cleared land which is capable of being cultivated. It includes land used for cropland, hay land, improved pastureland, truck gardens, farmsteads, commercial agricultural related facilities, feedlots, livestock confinement systems, land on which farm buildings within 100 feet of the pipeline are located, and land in government set-aside programs.

**Best Management Practice (BMP)**

Any structural, vegetative or managerial practice used to treat, prevent or reduce soil erosion. Such practices may include temporary seeding of exposed soils, construction of retention basins for storm water control and scheduling the implementation of all BMP's to maximize their effectiveness.

**Company**

Rockies Express Pipeline LLC, hereafter referred to as "Rockies Express", utility company, and any contractor or sub-contractor in the employ of Rockies Express for the purpose of completing the pipeline or any mitigative actions contained herein it's successors, and assigns, on its own behalf and as operator of the Company.

**Cropland**

Land used for growing row crops, small grains, or hay; Includes land which was formerly used as cropland, but is currently in a government set-aside program and pastureland that was formerly utilized as cropland or is comprised of prime farmland.

**Drain Tile**

Any artificial subsurface drainage system including: clay and concrete tile, vitrified sewer tile, corrugated plastic tubing, and stone drains.

**Landowner**

Person(s) holding legal title to property on the pipeline route from whom Rockies Express is seeking, or has obtained, a temporary or permanent

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easement, or any person(s) legally authorized by a landowner to make decisions regarding the mitigation or restoration of agricultural impacts to such landowner's property.

Non-Agricultural Land

Any land that is not "Agricultural Land" as defined above.

Pipeline

The pipeline and its related appurtenances described in the Company's application to the Federal Energy Regulatory Commission for a Certificate of Public Convenience and Necessity.

Prime farmland

Agricultural land comprised of soils that are defined by the USDA Natural Resources Conservation Service as being "prime" soils (generally considered the most productive soils with the least input of nutrients and management).

Right-of-way

Includes the permanent and temporary easements that Rockies Express acquires for the purpose of constructing and operating the pipeline.

Surface Drains

Any surface drainage system such as shallow surface field drains, grassed waterways, open ditches, or any other conveyance of surface water.

Tenant

Any person lawfully residing on or in possession of the land.

Topsoil

The upper most part of the soil commonly referred to as the plow layer, the A layer, or the A horizon, or its equivalent in uncultivated soils. It is the surface layer of the soil that has the darkest color or the highest content of organic matter (as identified in the USDA County Soil Survey and verified w/ right-of-way samples).

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**Construction Standards and Policies**

**1. Pipeline depth**

A. Except for aboveground piping facilities, such as mainline block valves, tap valves, meter stations, etc., the pipeline will be buried with:

1. a minimum of ~~4~~ feet of top cover where it crosses cropland.
2. a minimum of ~~4 feet of top cover~~ where it crosses pasture land or other agricultural land comprised of soils that are classified by the USDA as being prime soils.
3. a minimum of 3 feet of top cover where it crosses pasture land and other agricultural land not comprised of prime soils.
4. a minimum of 3 feet of top cover where it crosses wooded/brushy land.
5. substantially the same top cover as an existing parallel pipeline, but not less than 3 feet, where the route parallels an existing pipeline within a 100 foot perpendicular offset.
6. A minimum of 60 inches of cover shall be maintained over the top of the pipeline where it crosses surface drains, diversions, grassed waterways, open ditches, and streams.

B. Notwithstanding the foregoing, in those areas where (i) rock in its natural formation and/or (ii) a continuous strata of gravel exceeding 200 feet in length are encountered, the minimum depth of cover will be 24 inches.

C. On agricultural land subject to erosion, Rockies Express will patrol the pipeline right-of-way with reasonable frequency to detect areas of erosion of the top cover. In no instance will Rockies Express knowingly allow the depth of top cover to be less than 3 feet, except as stated in 1.C. above.

**2. Soil Removal and Replacement**

A. The topsoil shall be determined by a properly qualified agricultural inspector, soil scientist or soil technician who will set stakes or flags every 200 feet along the right-of-way identifying the depth of topsoil to be removed. As an alternative to staking or flagging, the Company may depict topsoil depths on alignment sheets based on published county-level soil survey information, if approved by the landowner.

B. At a minimum, the actual depth of the topsoil, not to exceed 18 inches, will first be stripped from the area to be excavated above the pipeline and the subsoil storage area. The topsoil will be stored in a windrow parallel to the pipeline trench in such a manner that it will not become intermixed with subsoil materials. Rockies Express may conduct full right-of-way topsoiling. Topsoil may be stored at either edge of the right-of-way, or in some cases spread over the working side of the right-of-way, but not intermixed with subsoil materials.

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- C. During the clearing/grading phase, the Agricultural Inspector shall monitor site-specific depths of topsoil stripping. Where right-of-way construction requires cut-and-fill of the soil profile across grades, to the extent practicable, topsoil stockpiling will be located on the up slope edge of the right-of-way. Where topsoil cannot be separately stored on the up slope side, suitable right-of-way space will be provided on the down slope side to ensure the complete segregation of the topsoil from all cut-and-fill material.
- D. All subsoil material that is removed from the trench will be placed in a second windrow parallel to the pipeline trench that is separate from the topsoil windrow.
- E. In backfilling the trench, the stockpiled subsoil material will be placed back into the trench before replacing the topsoil.
- F. Refer to Items Nos. 5.A and 5.B for procedures pertaining to rock removal from the subsoil and topsoil.
- G. Refer to Items Nos. 7.A through 7.C for procedures pertaining to the alleviation of compaction of the topsoil.
- H. The topsoil must be replaced so that after settling occurs, the topsoil's original depth and contour will be restored. The same shall apply where excavations are made for road, stream, drainage ditch, or other crossings. In no instance will the topsoil materials be used for any other purpose.
- I. Surface drainage should not be blocked or hindered in any way. If excess spoil is encountered, it will be removed offsite to prevent ridging. Adding additional spoil to the crown over the trench in excess of that required for settlement will not be permitted.

**3. Repair of Damaged Drain Tile Lines**

All drain tile repair and/or replacement shall be completed prior to topsoil replacement.

If underground drain tile is damaged by the pipeline installation, it shall be repaired in a manner that assures the drain tile proper operating condition at the point of repair. If underground drain tile lines in the pipeline construction area are adversely affected by the pipeline construction, the Company will take such actions as are necessary to insure the proper functioning of the drain tile lines, including the relocation, reconfiguration, and replacement of the existing drain tile lines. The following standards and policies shall apply to the drain tile line repair:

- A. The Company shall make a conscientious effort to locate all drain tile lines within the right-of-way prior to the pipeline installation. The Company will contact the local county Soil and Water Conservation Districts and affected Landowners and/or Tenants for their knowledge of drain tile line locations prior to the pipeline installation.

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All identified drain tile lines will be marked with a highly visible lathe to alert construction crews to the need for drain tile line repairs.

- B. During construction drain tile lines that are damaged, cut, or removed shall be distinctly marked by placing a highly visible lathe in the trench spoil bank directly opposite each drain tile line. This marker shall not be removed until the drain tile line has been permanently repaired and such repairs have been approved and accepted by the Landowner and the Agricultural Inspector.
- C. All drain tile lines shall be repaired with materials of the same or better quality as that which was damaged. The repair plans shall be approved by the Agricultural Inspector. In Ohio, all repairs shall be done according to ODNR detail numbers 5 through 10.
- D. Where drain tile lines are severed by the pipeline trench steel channel iron, steel angle iron, full-round slotted steel pipe, half-round steel pipe, or schedule 80 pvc pipe with 1/8 inch diameter holes shall be used to support the drain tile lines across the trench.
  - 1. If the drain tile repairs involve clay or concrete tile, the support member shall extend to the first tile joint beyond the minimum 3-foot distance. If the drain tile repairs involve plastic pipe it shall be supported at a 90-degree angle from the bottom of the drain tile. This may involve using angle iron to provide proper support.
  - 2. There shall be a minimum of 12 inches of clearance between the drain tile line and the pipeline whether the pipeline passes over or under the tile line.
  - 3. In no instance shall the grade of the drain tile line be decreased.
- E. Before completing permanent drain tile repairs, all drain tile lines shall be examined by suitable means on both sides of the trench for their entire length within the right-of-way to check for drain tile that might have been damaged by construction equipment. If any drain tile line is found to be damaged, it shall be repaired so it will operate as well after construction as before construction began.
- F. Temporary repairs of drain tile lines shall be made as soon as exposed. This shall include the use of filter material to prevent the movement of soil into the drain tile line or the temporary plugging of the drain tile line until permanent repairs can be made.
- G. All permanent drain tile line repairs shall be made within 14 days following completion of the pipeline installation on any affected Landowner's property unless otherwise authorized by the Landowner, weather and soil conditions permitting. Landowners and/or tenants will be contacted prior to final backfill and restoration and offered opportunity to witness final tile line repair.
- H. Following completion of the pipeline, Rockies Express will be responsible for correcting all tile line repairs that fail due to pipeline construction, provided those repairs were made by Rockies Express. Rockies Express will not be responsible for drain tile line repairs that Rockies Express pays the landowner to perform. The plans for the repairs shall be approved by the Landowner prior beginning work on the



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repair.

**4. Correction of Future Drainage Problems**

Rockies Express shall be responsible for installing such additional drainage measures as are necessary to properly drain wet areas on the permanent and temporary easements caused by the construction and/or existence of the pipeline.

**5. Rock Removal**

The following rock removal procedures only pertain to rocks found in the uppermost 42 inches of soil.

- A. Before replacing any topsoil, all rocks greater than 3 inches in any dimension will be removed from the surface of all exposed subsoil (i.e. working side and subsoil storage areas); and the top 42 inches or the actual depth of top cover, whichever is less, within the pipeline trench, bore pits, or other excavations shall not contain rocks of any greater concentration or size than existed prior to the pipeline construction.
- B. All rocks greater than 3 inches in any dimension will be removed from the topsoil surface using a rock rake following final restoration unless undisturbed areas adjacent to the ROW can be shown to contain similar concentration and size.
- C. If trenching, blasting, or boring operations are required through rocky terrain, suitable precautions will be taken to minimize the potential for oversized rocks to become interspersed with adjacent soil material.
- D. Rocks and soil containing rocks removed from the subsoil areas, topsoil, or from any excavations, will be returned to the pre-existing contours, hauled off the landowner's premises or disposed of on the landowner's premises at a location that is mutually acceptable to the landowner and Rockies Express and in accordance with any applicable laws or regulations.

**6. Removal of Construction Debris**

All construction-related debris and material that are not an integral part of the pipeline will be removed from the landowner's property. Such material to be removed would include litter generated by the construction crews which will be removed on a daily basis.

**7. Compaction, Rutting, Fertilization, Liming**

- A. In all agricultural sections of the right-of-way that were traversed by vehicles and construction equipment, where topsoil is stripped and prior to topsoil replacement, the subsoil shall be fractured by deep ripping to a depth not to exceed 16 inches below the surface of the subsoil with the appropriate industrial ripper. Subsurface features (i.e. drain tiles, other utilities) may warrant less depth. The ripper shall have maximum teeth spacing of 16 inches. The ripping shall be performed parallel to the pipeline and at 90 degrees to the pipeline. Following the ripping operation all stone and rock material three (3) inches and larger in size which has been lifted to the surface shall be collected and removed from the site for disposal.

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Upon approval by the Agricultural Inspector of the subsoil decompaction and the stone removal, the topsoil that has been temporarily removed for the period of construction shall then be replaced. The soil profile in the full width of the right-of-way shall be shattered to a depth not to exceed 16 inches with a heavy-duty subsoiling tool having angled legs. Stone removal shall be completed, as necessary, to eliminate any additional rocks and stones brought to the surface as a result of the final subsoil shattering process.

The existence of stumps, tile lines or underground utilities may necessitate less depth.

- B. The entire right-of-way will then be disked. Three passes will be made across any agricultural land that is ripped.
- C. Ripping and disking will be done at a time when the soil is dry enough for normal tillage operations to occur on undisturbed farmland adjacent to the areas to be ripped.
- D. Rockies Express will restore all compacted or rutted land as near as practicable to its original condition.
- D. The cost of applying fertilizer, manure, and/or lime will be included in the damages paid to the landowner, thereby allowing the landowner to apply the appropriate type and amounts of fertilizer, manure, and/or lime as needed depending on the crops contemplated and the construction schedule.

In Ohio, subsoil decompaction and topsoil replacement activities may have to be performed as weather permits due to the generally unsuitable weather for continuing agricultural land restoration in late autumn and winter. F. If there is a dispute between the landowner and Rockies Express as to what areas need to be ripped, the depth at which compacted areas should be ripped, or the necessity or rates of lime and fertilizer application, the appropriate county Soil and Water Conservation District's opinion will be considered by Rockies Express and the landowner.

**8. Land Leveling**

- A. Following the completion of the pipeline, Rockies Express will restore any right-of-way to its original pre-construction elevation and contour should uneven settling occur or surface drainage problems develop as a result of pipeline construction.
- B. Rockies Express will provide the landowners with a telephone number and address that may be used to alert Rockies Express of the need to perform additional land leveling services.
- C. If uneven settling occurs or surface drainage problems develop as a result of the pipeline construction, Rockies Express will provide land leveling services within 45 days of a landowner's written notice, weather and soil conditions permitting.
- D. If there is any dispute between the landowner and Rockies Express as to what areas

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need additional land leveling beyond that which is done at the time of construction, it will be Rockies Express's responsibility to disprove the landowner's claim that additional land leveling is warranted.

**9. Backfill Profile and Trench Crowning**

In all agricultural land areas, ripped or blasted bedrock or concentrated volumes of excavated stone or rock material may be used for trench backfill material, but no closer than 24 inches from the exposed working construction surface of the right-of-way. All rock not utilized as trench backfill material shall be removed from the right-of-way. The remaining backfill material shall consist of suitable subsoil material. Trench crowning shall occur during the trench backfilling operation using subsoil materials over the trench to allow for trench settling. In Ohio, this will be performed in accordance with ODNR detail number 13.

In areas where trench settling occurs after topsoil spreading, imported topsoil shall be used to fill each depression. Topsoil from the adjacent agricultural land shall not be used to fill the depressions.

In agricultural areas where the materials excavated during trenching are insufficient in quantity to meet backfill requirements, the soil of any agricultural land adjacent to the trench and construction zone shall not be used as either backfill or surface cover material. Under no circumstances shall any topsoil materials be used for pipe padding material or trench backfill. In situations where imported soil materials are employed for backfill on agricultural lands, such material shall be of similar texture and quality to the existing soils on site. Imported soils should be from similar soil types and free from noxious weeds and other pests to the extent possible.

**10. Prevention of Soil Erosion**

- A. Rockies Express will follow the guidelines described and approved in its Upland Construction Plan (REX Plan) and Wetland and Waterbody Construction and Mitigation Procedures (REX Procedures).
- B. Rockies Express will work with landowners to prevent excessive erosion on right-of-way that has been disturbed by construction. Reasonable methods will be implemented to control erosion. This is not a requirement, however, if the land where the pipeline is constructed is cropland, is not considered Highly Erodible Lands (HEL) by USDA standards, and that the landowner intends to leave bare until the next crop is planted.
- C. If the landowner and Rockies Express cannot agree upon a reasonable method to control erosion on the landowner's right-of-way, the recommendations of the appropriate county Soil and Water Conservation District and/or FERC will be considered by Rockies Express and the landowner.

**11. Repair of Damaged Soil Conservation Practices**

All soil conservation practices (such as spring developments and pipelines, terraces,

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grassed waterways, critical area seedings, etc.), which are damaged by the pipeline's construction, will be restored to their pre-construction condition. All wetland areas will be restored in accordance with the Rockies Express Procedures

**12. Control of Trench Washouts, Water Piping and Blowouts**

Trench breakers shall be installed for the dual purpose of preventing trench washouts during construction and abating water piping and blowouts subsequent to trench backfill. The distance between permanent trench breakers will be as described in Rockies Express's Upland Construction Plan and in Ohio meet the requirements as set forth in ODNR detail no.'s 11, 12, & 12A.. Rockies Express will record each installed trench breaker location, by map-referenced station-number.

**13. Damages to Private Property**

- A. Rockies Express will reasonably compensate landowners for any construction-related damages caused by Rockies Express that occur on or off of the established pipeline right-of-way.
- B. Compensation for damages to private property caused by Rockies Express shall extend beyond the initial construction of the pipeline, to include those damages caused by Rockies Express during future construction, operation, maintenance, and repairs relating to the pipeline.

**14. Clearing of Trees and Brush from the Easement**

- A. If trees are to be removed from the right-of-way, Rockies Express will consult with the landowner to determine if there are trees of commercial or other value to the landowner.
- B. If there are trees of commercial or other value to the landowner, Rockies Express will compensate the landowner at a fair market value for the trees as well as allow the landowner the right to retain ownership of the trees with the disposition of the trees to be negotiated prior to the commencement of land clearing.
- C. Rockies Express will identify black cherry trees located on the right-of-way near active livestock use areas during the construction plan development. Black cherry tree vegetation is toxic to livestock when wilted and shall not be stockpiled in areas accessible to livestock. During the clearing phase, such vegetation will be disposed of in a manner that prevents contact with livestock.
- D. Unless otherwise restricted by federal, state or local regulations, Rockies Express will follow the landowner's desires regarding the removal and disposal of trees, brush, and stumps of no value to the landowner by burning, burial, etc., or complete removal from any affected property.

**15. Interference with Irrigation Systems**

- A. If the pipeline and/or temporary work areas intersect an operational (or soon to be operational) spray irrigation system, Rockies Express will establish with the

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landowner an acceptable amount of time the irrigation system may be out of service.

- B. If, as a result of pipeline construction activities, an irrigation system interruption results in crop damages, either on the pipeline right-of-way or off the right-of-way, the landowner will be reasonably compensated for all such crop damages.
- C. If it is feasible and mutually acceptable to Rockies Express and the landowner, temporary measures will be implemented to allow an irrigation system to continue to operate across land on which the pipeline is also being constructed.

**16. Ingress and Egress Routes**

Prior to the pipeline's installation, Rockies Express and the landowner will reach a mutually acceptable agreement on the route that will be utilized for entering and leaving the pipeline right-of-way should access to the right-of-way not be practical or feasible from adjacent segments of the pipeline right-of-way; from public highway or railroad right-of-way or from other suitable public access.

Where access ramps/pads are required from the highway to the pipeline construction area, the topsoil shall be removed and stock piled for replacement, an underlayment of durable geotextile matting, or equivalent shall be placed over the exposed subsoil surface prior to the placement of temporary rock access fill material. All such material will be removed upon completion of the project. Complete removal of the ramp upon completion of the project and restoration of the impacted site is required prior to topsoil replacement.

**17. Temporary Roads**

- A. The location of temporary roads to be used for construction purposes will be negotiated with the landowner.
- B. The temporary roads will be designed to not impede surface drainage and will be built to minimize soil erosion on or near the temporary roads.
- C. Upon abandonment, temporary roads may be left intact through mutual agreement of the landowner and Rockies Express unless otherwise restricted by federal, state, or local regulations. If the temporary roads are to be removed, the right-of-way upon which the temporary roads are constructed will be returned to its previous use and restored to equivalent condition as existed prior to their construction.
- D. If the temporary roads are to be removed, the rights-of-way upon which the temporary roads are constructed will be returned to their previous use(s) and restored to equivalent condition(s) as existed prior to their construction. All temporary access roads that are removed shall be ripped to a depth not to exceed 16 inches. All ripping will be done consistent with Items 7.A. through 7.C.

**18. Weed Control**

- A. On any right-of-way over which Rockies Express has jurisdiction as to its surface use, (i.e., valve sites, metering stations, compression stations, etc.), Rockies

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Express will provide for weed control in a manner that prevents the spread of weeds onto adjacent lands used for agricultural purposes. Spraying will be done by a pesticide applicator that is appropriately licensed for doing such work in the state of Illinois.

- B. Rockies Express will be responsible for reimbursing all reasonable costs incurred by owners of land adjacent to surface facilities when the landowners must control weeds on their land which can be determined to have spread from land accommodating pipeline surface facilities, should Rockies Express fail to do so after being given written notice and a 45-day opportunity to respond.

**19. Pumping of Water from Open Trenches**

- A. No back filling shall be done in water filled trench. All freestanding water shall be removed prior to any back filling.
- A. In the event it becomes necessary to pump water from open trenches, Rockies Express will pump the water in a manner that will avoid damaging adjacent agricultural land, crops, and/or pasture. Such damages include, but are not limited to, the inundation of crops for more than 24 hours, the deposition of excessive sediment in ditches and other water courses, and the deposition of subsoil sediment and gravel in fields and pastures.
- B. If it is impossible to avoid water-related damages as described in Item 19.A. above, Rockies Express will reasonably compensate the landowners for the damages or will correct the damages so as to restore the land, crops, pasture, water courses, etc. to their pre-construction condition.
- C. All pumping of water shall comply with existing drainage laws, local ordinances relating to such activities, and provisions of the Clean Water Act.

**20. Aboveground Facilities**

Locations for aboveground facilities shall be selected in a manner so as to be as unobtrusive as reasonably possible to ongoing agricultural activities occurring on the land adjacent to the facilities. Aboveground facilities on the right-of-way will be located in a manner that attempts to minimize the loss of agricultural land first, and secondly, the impacts to other environmental features. If this is not feasible, such facilities shall be located so as to incur the least hindrance to the adjacent cropping operations (i.e., located in field corners or areas where at least one side is not used for cropping purposes).

**21. Advance Notice of Access to Private Property**

- A. Rockies Express will provide the landowner or tenant with a minimum of 24 hours prior notice before accessing his/her property for the purpose of constructing the pipeline.
- B. Prior notice shall first consist of a personal contact or a telephone contact, whereby the landowner or tenant is informed of Rockies Express's intent to access the land. If the landowner or tenant cannot be reached in person or by telephone, Rockies

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Express will mail or hand deliver to the landowner or tenant's home a dated, written notice of Rockies Express's intent. The landowner or tenant need not acknowledge receipt of the written notice before Rockies Express can enter the landowner's property.

**22. Reporting of Inferior Agricultural Impact Mitigation Work**

No later than 45 days prior to the commencement of the pipeline construction across a landowner's property, Rockies Express will provide the landowner with a toll-free number the landowner can call to alert Rockies Express should the landowners observe inferior agricultural impact mitigation work which is being done or has been carried out on his/her property.

**23. Indemnification**

Rockies Express will indemnify all owners of agricultural land upon which such pipeline is installed. This indemnification is made part of each easement agreement.

**24. General Monitoring and Remediation**

Rockies Express will provide a monitoring and remediation period of no less than three years immediately following the full-length activation of the pipeline or the completion of initial right-of-way restoration, whichever occurs last. The Company shall be responsible for the cost of the monitoring and remediation. The two-year period allows for the effects of climatic cycles such as frost action, precipitation and growing seasons to occur, from which various monitoring determinations can be made. The Company shall maintain an Agricultural Inspector on at least a part-time basis through this period. The monitoring and remediation phase shall be used to identify any remaining impacts associated with the pipeline construction that are in need of correction and to implement the follow-up restoration.

General right-of-way conditions to be monitored include topsoil thickness, relative content of rock and large stones, trench settling, crop production, drainage and repair of severed fences, etc. The problems or concerns shall be identified through on-site monitoring of all areas along the right-of-way and through contact with respective landowner/operator and local county Soil and Water Conservation District.

Topsoil deficiency and trench settling shall be restored with imported topsoil that is consistent with the quality of topsoil on the affected site. Excessive amounts of rock and oversized stone material shall be determined by a visual inspection of the right-of-way. Results shall be compared to portions of the same field located outside of the right-of-way. Included in the determination of relative rock and large stone content is the right-of-way's condition subsequent to tillage and the relative concentration of such materials within the right-of-way as compared to off the right-of-way. All excess rocks and large stones shall be removed and disposed of by the Company.

On site monitoring on agricultural lands shall be conducted at least three times during the growing season and shall include a comparison of growth and yield for crops on and off the right-of-way. When the subsequent crop productivity within the affected right-of-way is less than that of the adjacent unaffected agricultural land, the Agricultural

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Inspector, in conjunction with the Company as well as other appropriate organizations, shall help to determine the appropriate rehabilitation measures for the Company to implement. During the various stages of the project, all affected farm operators shall be periodically apprised of the duration of remediation by their respective Agricultural Inspector. Because conditions that require remediation may not be noticeable at or shortly after the completion of construction, the signing of a release form prior to the end of the remediation period shall not relieve the Company's responsibility to fully redress all project impacts. After completion of the specific remediation period, the Company shall continue to respond to the reasonable requests of the landowner/operators to correct project related affects on the agricultural resources.

On lands subject to erosion, the Company shall patrol the pipeline right-of-way with reasonable frequency to detect erosion of the top cover. Whenever the loss of cover due to erosion creates a safety issue the Company shall take corrective action.



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