

ROCKIES EXPRESS PIPELINE COMPANY LLC

ROCKIES EXPRESS PIPELINE – EAST PROJECT
WEED MANAGEMENT PLAN

July 2007

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WEED MANAGEMENT PLAN

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ROCKIES EXPRESS PIPELINE-EAST PROJECT WEED MANAGEMENT PLAN

1.0 INTRODUCTION

Under Executive Order 13112, federal agencies shall not authorize, fund, or carry out actions that are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species. Under the Noxious Weed Act, county, state, and federal agencies are charged with the responsibility to identify and control invasive plant species that are harmful to public health, crops, livestock, land, or other property. To assist this effort, Rockies Express Pipeline Company LLC (Rockies Express) has developed this Weed Management Plan to support the Rockies Express Pipeline-East (REX-East) Project.

1.1 PLAN PURPOSE

The purpose of this plan is to prescribe methods to prevent and control the spread of noxious weeds during and following construction of the REX-East Project. Rockies Express and its contractors will be responsible for carrying out the methods described in this plan.

1.2 GOALS AND OBJECTIVES

Noxious weeds have the potential to invade areas disturbed by construction and may spread along the cleared areas of the pipeline right-of-way. Soil disturbance may also allow weed seed already present to germinate and grow. The goals of weed control are to implement preventative measures to eliminate the spread of noxious weeds during construction of the pipeline and to implement prescribed treatments to eliminate, to the maximum extent possible, the invasion of noxious weeds from surrounding lands.

2.0 NOXIOUS WEED INVENTORY

Rockies Express conducted file searches and noxious weed consultations to identify existing noxious weed infestations along the pipeline right-of-way and adjacent additional temporary workspace areas, at aboveground facility sites, along new or improved access roads, and within ancillary facility locations where clearing will be required. To identify noxious weeds that potentially occur within the proposed project area and known locations of noxious weed infestations crossed by the proposed project, as well as seeding recommendations, erosion control recommendations, and the identification of Wetland Reserve Program and Conservation Reserve Program lands in the project area, Rockies Express consulted with the Natural Resources Conservation Service (NRCS) offices in Missouri, Illinois, Indiana, and Ohio. Early identification of existing infestations is intended to help minimize the spread of noxious weeds by identifying sites where preventative measures could be implemented.

NRCS offices in Missouri, Illinois, and Indiana all responded to consultation requests by providing state-specific NRCS Critical Area Planting Conservation Standards. In

addition, the Missouri NRCS provided a list of statewide noxious weed species. The Ohio NRCS declined participation in the consultation process. Table 2-1 lists the noxious weeds that have been identified as potentially occurring along the pipeline route.

Noxious Weed Species	State of Potential Occurrence			
	Missouri	Illinois	Indiana	Ohio
Burcucumber (<i>Sicyos angulatus</i>)			X	
Canada Thistle (<i>Cirsium arvense</i>)	X	X	X	X
Columbus Grass (<i>Sorghum almum</i>)		X	X	
Common Ragweed (<i>Ambrosia artemisifolia</i>)		X		
Common Teasel (<i>Dipsacus follonum</i>)	X			
Cressleaf Groundsel (<i>Senecio glabellus</i>)				X
Cut-leaved Teasel (<i>Dipsacus laciniatus</i>)	X			
Field Bindweed (<i>Convolvulus arvensis</i>)	X			
Giant Ragweed (<i>Ambrosia trifida</i>)		X		
Grapevines (<i>Vitis L.</i>)				X
Johnsongrass (<i>Sorghum halepense</i>)	X	X	X	X
Kudzu (<i>Pueraria lobata</i>)	X	X		
Mile-a-minute Weed (<i>Polygonum perfoliatum</i>)				X
Multiflora Rose (<i>Rosa multiflora</i>)	X		X	
Musk Thistle (<i>Carduus nutans</i>)	X	X		X
Ox-eye Daisy (<i>Chrysanthemum leucanthemum</i>)				X
Perennial Sowthistle (<i>Sonchus arvensis</i>)		X		
Poison Hemlock (<i>Conium maculatum</i>)				X
Purple Loosestrife (<i>Lythrum salicaria</i>)	X		X	X
Russian Thistle (<i>Salsola kali</i>)				X
Scotch Thistle (<i>Onopordum acanthium</i>)	X			
Shattercane (<i>Sorghum bicolor</i>)			X	X
Wild Carrot (<i>Daucus carota</i>)				X
Wild Mustard (<i>Brassica kaber</i>)				X
Wild Parsnip (<i>Pastinaca sativa</i>)				X

Source: U.S. Department of Agriculture. 2007. State Noxious Weed Reports. Available online at <https://plants.usda.gov/java/noxiousDriver>. Accessed March 2007.

3.0 NOXIOUS WEED MANAGEMENT

Weeds are spread by a variety of means including humans (e.g., hikers/recreationalists), vehicles, construction equipment, construction and reclamation materials, livestock, and wildlife. Implementation of preventative measures to control the spread of noxious weeds is the most cost effective management approach.

3.1 PREVENTATIVE MEASURES

The following preventative measures will be used to prevent the spread of noxious weeds along the REX-East Project:

- All Contractor vehicles and equipment will arrive at the work site clean and weed-free. Prior to being allowed access to the right-of-way or ancillary facilities, an inspector will ensure that vehicles and equipment are free of soil and debris capable of transporting noxious weed seeds, roots, or rhizomes.
- The contractor will implement the reclamation of disturbed lands following construction as outlined in the Rockies Express Pipeline-East Project Upland Construction Plan. Continuing revegetation efforts will ensure adequate vegetative cover to prevent the invasion of noxious weeds.
- The contractor will ensure soils imported for agricultural or residential use are free of noxious weeds, unless otherwise approved by the landowner.
- Equipment will not be sprayed with pre-emergent chemicals as a preventative measure as these chemicals target a wide range of vegetation. As a result, the use of such chemicals could affect the success of revegetation efforts.
- Field wash stations will not be used as a preventative measure as they have not proven to be an effective means of weed control. In order for a wash station to be effective, high pressure steam cleaners and controlled drainage are essential. These criteria cannot be met in the field. As a result, field wash stations run the risk of creating conditions favorable to seed germination (e.g., presence of seeds or rhizomes, presence of disturbed soils, water from uncontrolled drainage).

3.2 TREATMENT METHODS

Noxious weed controls will be used in accordance with existing regulations and landowner or agency agreements in non-agricultural lands and in above ground facilities. Upon locating and identifying noxious weeds subsequent to, during, or after construction, appropriate herbicides may be applied on the identified weed infestations along the construction right-of-way to reduce the spread or proliferation of weeds. Post-construction control measures may also include one or more of the following methods:

- Mechanical methods reliant on the use of equipment to disc or excavate weed populations. If this method is used, subsequent seeding will be conducted to re-establish a desirable vegetative cover which will stabilize the soils and slow the potential re-invasion of noxious weeds. Seed selection will be based on site-specific conditions, and the appropriate seed mix identified for those conditions.
- Biological methods can be an effective means of controlling the spread of noxious weed populations. The use of biological agents should be

coordinated with local agencies on a site-specific basis as some agents may also attack native species.

- Herbicide application is an effective means of reducing the size of noxious weed populations. Herbicide application and handling methods are described in section 5.0.
- In the event that an area is not seeded until the following spring because of weather or scheduling constraints, undesirable vegetation will be eradicated prior to seeding. A short-lived herbicide may be used to avoid impact to subsequent seeding.

3.3 EDUCATION

Rockies Express and the contractor(s) will provide information regarding noxious weed identification, management, and impacts on agriculture, livestock, and wildlife to their appropriate employees. The critical importance of preventing the spread of noxious weeds in areas not infested and controlling the proliferation of weeds already present will be explained. The importance of adhering to measures to prevent the spread of noxious weeds (e.g., not driving off the cleared right-of-way, cleaning vehicles that collect soil and plant seeds, and quickly identifying new infestations of noxious weeds) will be stressed.

4.0 MONITORING

Rockies Express will periodically monitor the right-of-way and ancillary facilities for noxious weeds following construction of the project. Treatment of infestation sites on the right-of-way or ancillary facilities identified during the monitoring is addressed in Rockies Express' Agricultural Impact Mitigation Plan.

5.0 HERBICIDE APPLICATION, HANDLING, SPILLS, AND CLEANUP

Herbicide selection (if required) would be based on information gathered from the NRCS state offices.

5.1 HERBICIDE APPLICATION AND HANDLING

- Prior to herbicide application, the contractor of Rockies Express will obtain any required permits from the NRCS if necessary, and in accordance to the REX-East Procedures. Herbicides will not be used within 100 feet of a wetland or waterbody, except as allowed by the appropriate land management agency or state agency. The chemical application will be done by a licensed contractor in accordance with all applicable laws and regulations. Herbicide label instructions will be strictly adhered to. Application of herbicides will be suspended when the following conditions exist:
 - wind velocity exceeds 6 miles per hour for application of liquids or 15 miles per hour for application of granular herbicides;
 - snow or ice covers the foliage of noxious weeds; or

- precipitation is occurring or likely to occur.

Vehicle-mounted sprayers (e.g., handgun, boom, injector) will be used primarily in open areas that are readily accessible by vehicle. Hand application methods (e.g., backpack spraying) that target individual plants will be used to treat small scattered weed populations in rough terrain. Calibration checks of equipment will be conducted at the beginning of spraying and periodically thereafter to ensure proper application rates are being achieved.

Herbicides will be transported daily to the project site with the following provisions:

- concentrate will be transported only in containers in a manner that will prevent tipping or spilling, and in a compartment that is isolated from food, clothing, and safety equipment; and
- mixing will only be conducted on-site and will only be done more than 200 feet from open or flowing water, wetlands, or other sensitive resources.

All herbicide equipment and containers will be inspected daily for leaks.

5.2 HERBICIDE SPILLS AND CLEANUP

Rockies Express has created a Spill Prevention, Containment, and Countermeasure Plan. All reasonable precautions will be taken to avoid spilling herbicides. In the event of an herbicide spill, a spill kit carried in company vehicles and/or kept in herbicide storage areas will allow for a quick and effective response to spills. Items in a spill kit may include (but is not limited to):

- Protective clothing and gloves;
- Absorbent clay, "kitty litter", or other commercial adsorbent;
- Plastic bags and bucket;
- Shovel;
- Fiber brush and screw-in handle;
- Dust pan;
- Caution tape;
- Highway flares (for use on established roads only); and
- Detergent.

Response to a herbicide spill will vary with the size and location of the spill, but general procedures include:

- Traffic control;
- Dress cleanup team with protective clothing;
- Stop leaks;
- Contain spilled material;

- Clean up and remove spilled herbicide and contaminated adsorptive material and soil; and
- Transport spilled pesticide and contaminated material to an authorized disposal site.

5.3 WORKER SAFETY AND SPILL REPORTING

All herbicide contractors will obtain and have readily available copies of the appropriate Material Safety Data Sheets for the herbicides being used. Herbicide spills will be reported in accordance with all applicable laws and requirements.

6.0 REFERENCES

Natural Resources Conservation Service (NRCS). 2006. Letter dated June 23, from R. Hansen (NRCS) to B. Jensen (Natural Resource Group, Inc.).

Natural Resources Conservation Service (NRCS). 2007a. Letter dated February 5, from R. L. McLeese (NRCS) to S. Holden (Natural Resource Group, Inc.).

Natural Resources Conservation Service (NRCS). 2007b. Letter dated February 9, from J. Montoya (NRCS) to S. Holden (Natural Resource Group, Inc.).

Natural Resources Conservation Service (NRCS). 2007c. Telephone communication on February 21, between R. Ellsmore (NRCS) and S. Holden (Natural Resource Group, Inc.).

U.S. Department of Agriculture. 2007. State Noxious Weed Reports. Available online at <https://plants.usda.gov/java/noxiousDriver>. Accessed March 2007.