

VTRANS MAINTENANCE DISTRICT HAZARD TREE CUTTING ENVIRONMENTAL STANDARD OPERATING PROCEDURE (SOP)

June 2017

Purpose:

Assigning a risk-based approach to District hazard tree removal activities within the ROW; and aligning risk categories with natural and cultural resource review & permitting requirements.

Applicability:

Cutting trees 3 or more inches in diameter are subject to this Guidance. Cutting brush and/or pruning limbs less than 3-inch diameter is not subject to this Guidance.

Definition:

A hazard tree shall be defined as any tree **hanging over or within impact distance (fall zone) of the highway and/or private developed property or in the highway clear zone** that:

- May fail due to mortality, a structural defect, or changed stand conditions and as a result may cause property damage or personal injury, or
- Poses an encroachment to the roadway/ROW that results in an increased safety risk

Categories:

High Risk

Any tree, or group of trees, that poses an imminent "hazard" threat to the safety of the traveling public or private developed property.

- A. Dead trees of any species
- B. Dying, diseased or damaged trees that have or are:
 - 1) Open seams, fully split, large woodpecker excavations, etc.
 - 2) Broken or partially tipped over by wind or ice or other forces
 - 3) Apparent canker or root rot
 - 4) Obvious deterioration
- C. Otherwise healthy trees that are:
 - 1) Growing out of ledge faces
 - 2) Growing in the clear zone not protected by guardrail
 - 3) Overhanging or leaning towards the roadway
 - 4) Blocking signs, signals, or lights or interfering with sight distances
(tree pruning is preferred over removal and tree pruning is not subject to this Guidance)

Hazard Tree Cutting under High Risk will be accomplished in response to a recognized immediate threat through District forces or MRA or through a construction contract when that threat is within the limits of an active construction project.

For District High Risk Tree cutting activities, coordination with the Project Delivery Bureau (PDB) Environmental Section is not necessary. However, to avoid or minimize impacts to environmental resources, the Environmental Standard Operating Procedures should be employed to the maximum extent possible/practicable.

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Moderate Risk

Any tree, or group of trees, that poses a probable or possible “hazard” threat to negatively impact the safety of the traveling public or private developed property.

- A. Fast growing weak-wooded trees, including but not limited to:
 - 1) Trees that are not resilient to high winds and heavy snow loads such as Birch and Poplar
 - 2) Pioneer species such as Populus (i.e. aspen and cottonwood), Prunus (i.e. black and pin cherry), or Betula (i.e. paper and gray birch), that tend to rapidly establish on open or abandoned land, grow quickly and die young and are nearing their expected life span.
- B. Structurally defective or unstable trees:
 - 1) Individual or stands of trees that grow under heavy stocking conditions, with small crowns and thus small root systems (Stands of such trees become more susceptible to wind damage with each passing year and when they eventually do begin to tip over, they often do so in groups)
 - 2) Interior trees exposed due to removal of edge trees that may pose a risk to the highway once edge trees are removed
 - 3) Shallow-rooted trees on top of ledges or in saturated soils
 - 4) Trees susceptible to mortality due to insects or disease.
- C. Trees shading roadways causing unsafe winter driving conditions or increased winter de-icing burdens.

Hazard Tree Cutting under Moderate Risk will be accomplished through District forces or MRA or through pay items included in PDB project contracts. Moderate Risk Hazard Tree Cutting may also fall under a statewide right-of-way reclamation effort, which will address larger scale vegetation management needs and activities along highway rights-of-way.

For District Moderate Risk cutting, no environmental review is necessary when SOPs can be met. For District Moderate Risk cutting when SOPs cannot be met, requests for environmental review will follow the same process as is established for PDB projects and shall be submitted through NERD, the electronic submittal for PDB Environmental Section Project Review (see attached instructions).

Transport of dead, dying or diseased trees (applies to both risk categories):

1. State and federal quarantines regulate the transport of firewood, including logs intended for firewood, out of the State.
2. Emerald ash borer (EAB) has caused widespread ash mortality in other states, and is expected to be found soon in Vermont. Trees suspected of having EAB should be reported immediately to your [County Forester](#) or other Vermont Dept. of Forests, Parks & Recreation (VTFP&R) staff, or you can “Report It” through the Vermont Invasive website, <http://vtinvasives.org/>. Trees suspected of having EAB should not be transported from where they are cut. More information about EAB can be found at: <http://www.vtinvasives.org/invaders/emerald-ash-borer>.
3. Once EAB is detected in Vermont, ash trees and hardwood firewood will need to follow USDA and State of Vermont quarantine guidelines, which may limit transport of trees that are cut within the regulated area.
4. VTFP&R best management practices suggest limiting transport of trees cut for firewood within 25 miles from where the trees are cut.

VTRANS MAINTENANCE DISTRICT HAZARD TREE CUTTING ENVIRONMENTAL STANDARD OPERATING PROCEDURE (SOP)

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Purpose:

These Environmental SOPs are intended for use to determine the need for PDB Environmental Section Review for proposed tree cutting activities.

Select Risk Category then determine need to consider using SOP Checklist or further coordination with the Environmental Section.

High Risk

For District High Risk Hazard Tree cutting activities, these Standard Operating Procedures (SOPs) should be employed to the extent possible/practicable. The SOP checklist should be referenced for that purpose; however completion and filing of the actual checklist is not required.

Moderate Risk

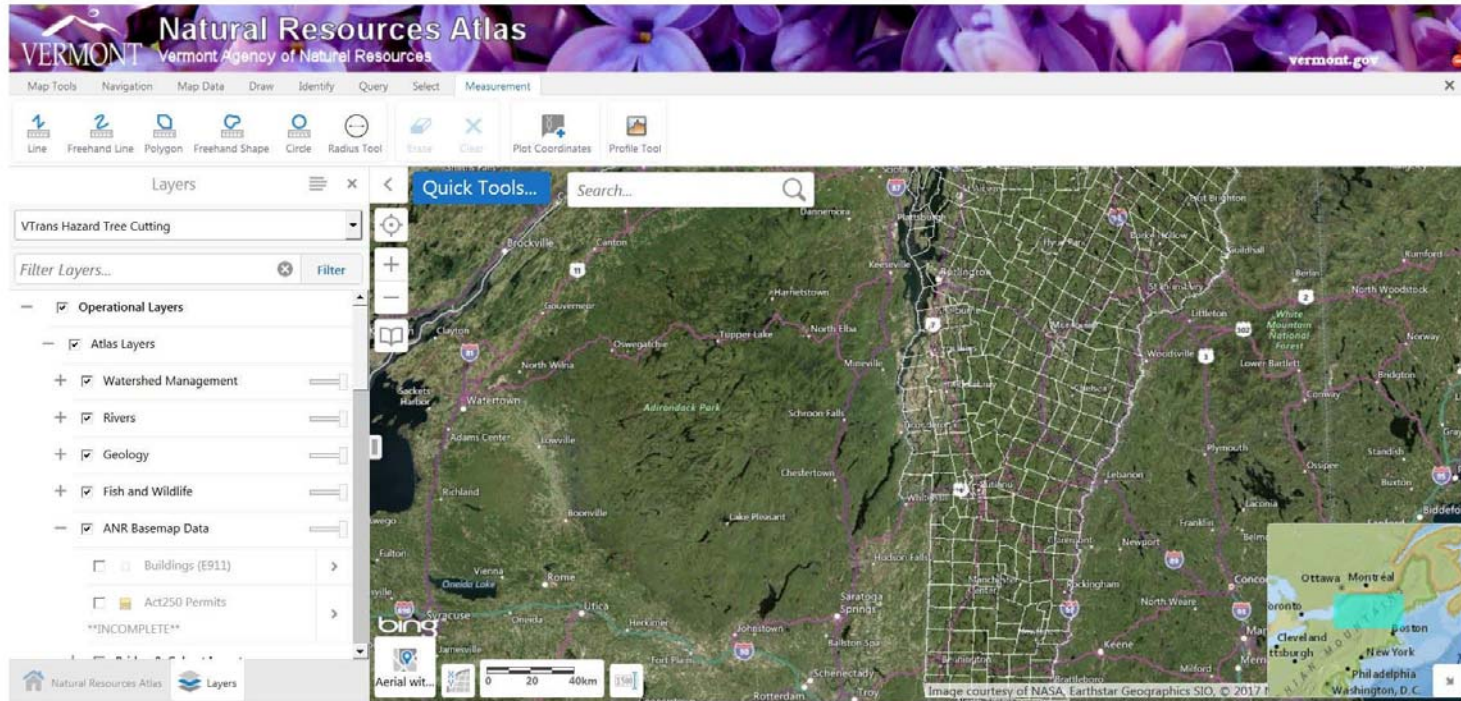
For District Moderate Risk Hazard Tree Cutting, no environmental review is necessary when these SOPs can be met. For District moderate risk cutting when SOPs cannot be met, requests for environmental review shall be submitted through NERD, the electronic submittal for PDB Environmental Section Project Review (see attached instructions). The SOP Checklist shall be used to determine the need for coordination with PDB Environmental.

- Use [ANR Atlas](#) "VTrans Hazard Tree Cutting" Theme Layer (instructions attached) and a site inspection to determine presence of natural resources.
- Perform site inspection to identify any above ground cultural resources (stone walls, cellar holes, foundations, grave stones, etc.) through visual inspection.
- Avoid impacts to resources by:
 - Installing temporary access roads that:
 - Avoid mapped and field identified natural resources
 - Avoid identified cultural resources (for example: use established openings in stone walls where it is necessary to access land beyond the wall)
 - Avoid existing stormwater treatment areas
 - Can be removed and the disturbed area restored to a previous vegetated condition immediately after cutting is performed (where possible use geotextile under fill to maintain natural conditions). Tracking equipment over land does not constitute a road but proper vegetation restoration is required.
 - Involve less than 1 acre of disturbed earth
 - Performing machine access work in dry/non-wet conditions (or when possible on frozen ground)
 - Performing work at least 50 ft from identified wetlands
 - Performing work at least 50 ft from streams; with the exception of necessary crossings
 - Installing stream crossings to span the stream entirely (i.e. top of bank to top of bank)
 - Avoiding cuts within 500 ft of identified Rare, Threatened, Endangered (R,T,E) species
 - Conducting tree cuts in accordance with the [VTrans Bat Guidance](#)
 - Stabilizing exposed soils within 48 hours of disturbance (or sooner if there is wet weather predicted) and implement other EPSC measures in accordance with [ANR Low Risk Sites Handbook](#)
 - Felling trees away from or otherwise physically protecting stone walls, foundations, grave stones, etc. during harvesting
 - Avoiding cutting legacy/veteran/heritage trees
 - Grinding stumps (as opposed to pulling) or cut flush
- File documentation (SOP Checklist) of analysis to avoid resources.

**VTrans Maintenance District Hazard Tree Cutting
Environmental SOPs Checklist**
(To be used as reference for High Risk and completed and filed for Moderate Risk)

District:	POC:
Route:	MM:
Stumps: ___ Grinding or Cutting Flush ___ Pulling (if Pulling, Environmental review is req'd)	
Off-Site Activity Review req'd: ___ Yes ___ No (check Yes, only if Exemptions criteria cannot be met)	
Resource	Mitigating Measures
Cultural Resources identified (as identified from field review) <ul style="list-style-type: none"> <input type="checkbox"/> stone walls <input type="checkbox"/> cellar hole <input type="checkbox"/> foundation <input type="checkbox"/> grave stones <input type="checkbox"/> legacy/veteran/heritage tree <input type="checkbox"/> Other _____	<ul style="list-style-type: none"> <input type="checkbox"/> Install access roads around identified resource <input type="checkbox"/> Use existing stone wall openings <input type="checkbox"/> Fell trees away from identified resources <input type="checkbox"/> Construct or install physical protection measure for identified resource <input type="checkbox"/> Do not cut legacy/veteran/heritage trees <input type="checkbox"/> Do not pull stumps
Natural Resources identified (as identified from Arc GIS and field review) <ul style="list-style-type: none"> <input type="checkbox"/> Stream <input type="checkbox"/> Wetland <input type="checkbox"/> Rare, Threatened, Endangered <input type="checkbox"/> Other _____	<ul style="list-style-type: none"> <input type="checkbox"/> Perform work > 50 ft from stream <input type="checkbox"/> Install stream crossings to span the stream entirely (i.e. top of bank to top of bank) <input type="checkbox"/> Perform work > 50 ft from identified wetland <input type="checkbox"/> Do not waste chips in identified wetlands <input type="checkbox"/> Perform machine work in dry/non-wet conditions <input type="checkbox"/> Avoid cuts w/in 500 ft of identified R,T,E <input type="checkbox"/> Conducting tree cuts in accordance w/ VTrans Bat Guidance <input type="checkbox"/> Return areas to original grade
Stormwater Resources Identified (include on Resource Map as identified from Arc GIS and field review) <ul style="list-style-type: none"> <input type="checkbox"/> Existing SW treatment areas 	<ul style="list-style-type: none"> <input type="checkbox"/> Avoid alteration of existing SW treatment areas <input type="checkbox"/> Return access road to pervious vegetated conditions immediately upon completion of cutting
Erosion Prevention and Sediment Control Measures to be implemented: <ul style="list-style-type: none"> <input type="checkbox"/> Seed and mulch <input type="checkbox"/> Silt fence <input type="checkbox"/> Erosion Matting <input type="checkbox"/> Other _____	<ul style="list-style-type: none"> <input type="checkbox"/> Stabilize exposed soils within 48 hours of disturbance (or sooner if there is wet weather predicted) and implement other EPSC measures in accordance with ANR Low Risk Sites Handbook
<input type="checkbox"/> Resource Map generated	<input type="checkbox"/> Resource Map provided to field crew
Additional Comments:	

[ANR Atlas](#) “VTrans Hazard Tree Cutting” Theme Layer



<http://anrmaps.vermont.gov/websites/anra/>

Go to the 'Layer Theme' pull down in the upper left corner of the screen and select 'VTrans Hazard Tree Cutting'.

Environmental Section Project Review

Instructions for electronic submittals, a.k.a. NERD requests

For District Project reviews, Resource Identification requests, NEPA reviews (including Re-evaluations), and/ or Environmental Permitting please send requests using our Environmental Electronic Submittal Form (a.k.a. NERD).

NERD Link:

<http://aotapps/EnvironmentalRequestAdmin/default.aspx> (This link can also be found on the [VTrans Environmental Section website](#), in VPINS, and in [VIPER](#)).

1. Under Request Forms, use Agency Request
2. In the "Environmental Requests - Request Entry Form" chose either the:
 - a. District\Other Project Request button for non-programmed projects, or
 - b. Capitol Program Project Request button for programmed projects
3. District\Other Project Request
 - a. Under Request Activity, use Environmental Permits – OPS (This will submit a single request for both the resource clearance reviews and for environmental permitting).
 - b. The remaining boxes and drop downs should be self-explanatory.
 - c. Note: Please be sure to include the following info, which can also be sent via email attachment - location map; photos; sketches/ drawings/ plans; impact plans/quantities for wetlands, below ordinary high water, streams, etc. Please do not merge documents/ files into one pdf.
 - d. See screen shot example below.
4. Capitol Program Project Request
 - a. Chose the Program and Project Name & Number.
 - b. Under Request Activity, there are the following request choices for the Environmental Section reviews (please note that there are also several requests for the Hydraulics Section):
 - i. Arch\Historic\Bio Resource Identification - requires a location map
 - ii. NEPA Document - requires Conceptual Plans and supporting documents (if available)
 - iii. Environmental Permits - requires Preliminary Plans and Project Impact Data Form
 - iv. NEPA Re-eval - requires Scope Change Letter, Plans, and existing NEPA document(s)
 - c. Please do not merge documents/ files into one pdf.
 - d. The remaining boxes and drop downs should be self-explanatory.
 - e. See screen shot example below.
 - f. Activity Codes that should be used:
 - i. 030.01.90 Resource ID
 - ii. 040.04 NEPA Document
 - iii. 060.05 Environmental Permits
 - iv. 060.10 NEPA Re-Evaluation
5. If you have questions, please notify the VTrans Environmental Section.
 - a. Link: <http://vtransengineering.vermont.gov/bureaus/pdb/environmental>

The NERD link can also be used to check project status. Under Administration, use Requests By Activity, then in Select Request Activity: chose Resource Specialist for Resource Clearance review dates or chose Environmental Permits for permit dates.

Environmental\Hydraulic Request - Admin - Windows Internet Explorer provided by Vermont Agency of Transportation

http://aotapps/EnvironmentalRequestAdmin/default.aspx

File Edit View Favorites Tools Help

VERMONT Agency of Transportation

Environmental\Hydraulic Request - Administration

Main

Administration

[Requests By Activity](#)
[Reporting](#)

Request Forms

[Agency Request](#)
[Hydraulic Study Request for Towns](#)

Environmental Requests - Request Entry Form - Windows Internet Explorer provided by Vermont Agency of Transportation

VERMONT Environmental\Hydraulic Request
Vermont Agency of Transportation

District\Other Project Request
 Capital Program Project Request

Program:

Project Name & Number:

Request Activity:

File(s): Browse... *NOTE: Please attach files from the M:\ or Z:\ drives.

Contact Name:

RAMSEY, JEFFERY (Environmental)

Phone Number:

(802) 828-1278

Email:

jeff.ramsey@vermont.gov [Enter Additional Email\(s\)](#)

Comments:

Submit

Environmental\Hydraulic Request - Admin - Windows Internet Explorer provided by Vermont Agency of Transportation

http://aotapps/EnvironmentalRequestAdmin/default.aspx

File Edit View Favorites Tools Help

VERMONT Agency of Transportation

Environmental\Hydraulic Request - Administration

Main

Administration

[Requests By Activity](#)
[Reporting](#)

Request Forms

[Agency Request](#)
[Hydraulic Study Request for Towns](#)

Environmental Requests - Request Entry Form - Windows Internet Explorer provided by Vermont Agency of Transportation

VERMONT Environmental\Hydraulic Request
Vermont Agency of Transportation

District\Other Project Request
 Capital Program Project Request

Request Activity:

Town: Route/Town Highway: Mile Marker/Bridge #/Location: District:

Scope Of Work(including access areas):

File(s): Browse... *NOTE: Please attach files from the M:\ or Z:\ drives.

Contact Name:

RAMSEY, JEFFERY (Environmental)

Phone Number:

(802) 828-1278

Email:

jeff.ramsey@vermont.gov [Enter Additional Email\(s\)](#)

Comments:

Note: Please send the following info via email attachment or mail

- location map
- sketch/drawings/plans
- impacts: wetlands, below ordinary high water, streams, etc.
- photos

Submit