NOTICE OF OPERATIONS
DETAILED PLAN OF OPERATIONS
HARVEST & SILVICULTURAL CHARACTERISTICS

If the silvicultural activities in multiple units share a similar location, topographic characteristics and management treatments, list them on this page as a group. If the characteristics of the units are different, list each unit on a separate page. Attach additional detail pages as necessary to describe the activity. The following information should adequately describe the activity's potential to effect resources deemed important to the State in the Alaska Forest Resources and Practices Act and Regulations.

UNIT IDENTIFICATION(S): _____
_____

Which of the following best describes the unit's topography?
[ ] Relatively Flat [ ] Uniform Hillside [ ] Irregular or Complex Slopes

What percent of the unit occupies slopes greater than 67%? _____

TYPE OF ACTIVITY:
[ ] Clearcut [ ] Partial Cut [ ] Salvage [ ] Other (Specify) _____
[ ] Precommercial Thinning [ ] Chemical Application [ ] Commercial Thinning

FOR REGION II OR III – SEASON OF HARVESTING
[ ] Winter harvest only
[ ] Non-winter harvest only
[ ] All-season harvest

CUTTING METHODS:
[ ] Chainsaw [ ] Feller-Buncher [ ] Whole Tree Processor [ ] Other _____

YARDING METHODS:
[ ] Cable Yarding
Type: [ ] High Lead [ ] Skyline [ ] Other _____

[ ] Ground Skidding
Type: [ ] Crawler Tractor [ ] Rubber Tired Skidder [ ] Shovel
Will forwarders or other off-road methods be used? [ ]YES [ ] NO

[ ] Helicopter [ ] Other (Specify) _____

Will the activity be done by the: [ ] operator [ ] operator's contractor
If "contractor", has the contractor been copied this plan of operations? [ ]YES [ ] NO

Name of contractor: _____

List the roads or other means required for the access and removal of this timber from the landowner's property. _____

NOTICE OF OPERATIONS
DETAILED PLAN OF OPERATIONS
REFORESTATION COMMITMENT

Regeneration of forested land is required within a specified time frame for each Region by the Alaska Forest Resources and Practices Regulations. See Sections 11 AAC 95.375, .380 and .385 for information on landowner's responsibilities. **Operators in Regions II and III must fill out Supplemental Sheet "C"** unless the operation is part of a land use conversion or the landowner requests an exemption from reforestation requirements~~is requested.~~

An exemption from the reforestation standards may be given if the landowner can demonstrate to the satisfaction of the Area Forester that:

1. The stand is significantly composed of insect and disease-killed, wind thrown, fire killed, or fatally damaged trees;
2. The land will be converted to another use in accordance with 11 AAC 95.200;
3. The stand will have a residual amount of trees that meet the minimum standards set out in 11 AAC 95.375(b) (3) and (4).

[ ] Land owner requests an exemption from reforestation under 11AAC 95.375(g). Submit supporting documentation as per the Alaska Forest Resources and Practices Regulations or as directed by the Division of Forestry.

[ ] Land owner requests a variation from reforestation standards under 11AAC 95.375(c). Submit documentation of pre-harvest stocking and distribution as per the Alaska Forest Resources and Practices Regulations or as directed by the Division of Forestry.

[ ] Land use conversion (include a letter to the Division of Forestry stating the nature of the conversion, i.e. commercial, residential, agriculture or recreational land use).

REGENERATION METHOD

[ ] Landowner will rely on natural regeneration of the site. Please provide known information on the following indicators of suitability for natural regeneration. Where boxes are checked "no", please explain. N/A means "not applicable."

Yes	No	N/A	Unknown	
Seedbed and soil conditions suitable				
[ ]	[ ]	[ ]	[ ]	Moss layers are shallow (<4") or absent
[ ]	[ ]	[ ]	[ ]	Where birch or spruce regeneration is targeted, exposed mineral soil will exist on at least 25% of the harvest area and is well-distributed across the unit
[ ]	[ ]	[ ]	[ ]	Where aspen regeneration from suckering is targeted, root damage will be minimal and soil exposure will encourage warming.

Seed/vegetative reproduction sources available

[ ] [ ] [ ] [ ] Exposure to prevailing winds, if known

[ ] [ ] [ ] [ ] Adequate seed trees exist within 3 tree heights of the reforestation site for spruce or within 2 tree heights for birch

[ ] [ ] [ ] [ ] Where spruce regeneration is targeted, large seed crop in year prior to harvest or current year

[ ] [ ] [ ] [ ] Where vegetative reproduction is targeted the harvest area Contains sufficient, well-distributed paper birch, aspen, balsam poplar, western black cottonwood, red alder, or other species known to revegetate vegetatively as approved by the Division.

Competition and infestation risk

[ ] [ ] [ ] [ ] *Calamagrostis* (bluejoint grass) is not visually evident. If *Calamagrostis* is visually evident, describe abundance and distribution. Note: *Calamagrostis* coverage of more than 1-2% distributed across the site indicates that grass coverage may expand rapidly after harvest without treatment.

[ ] [ ] [ ] [ ] *Equisetum* (horsetail) is present prior to harvest

[ ] [ ] [ ] [ ] The site is not currently subject to intense herbivory due to peaks in the hare cycle, dense moose populations, or scarcity of browse in the surrounding landscape.

[ ] [ ] [ ] [ ] Existing stands are not infested with bark beetles *(Dendroctonus* or *Ips)*

[ ] [ ] [ ] [ ] Where spruce regeneration is targeted, harvest areas are free of known incidence of *Onnia tomentosus* root rot. Note: *tomentosus* can kill regeneration of spruce and, to a lesser degree, pine and larch. If *tomentosus* is present, describe the extent of the problem in the notes box below. Reforestation should be designed to minimize continuation or spread of the disease

Notes:

Note: If likely competition or other factors indicate challenges for natural reforestation, prompt reforestation through site preparation and/or artificial regeneration is recommended to ensure success and minimize costs.

[ ] Landowner requests an extended period for natural regeneration under 11 AAC 95.XXX

[ ] Landowner will be artificially regenerating the site.

Species and source of seedlings or seed: _____

Date of proposed artificial planting: _____

SITE PREPARATION METHOD

What method of site preparation will be used? If different types of preparation methods are to be used in the notification area, attach adequate detail to define their location.

_____

_____

When will site preparation be accomplished? _____

Form 10-41-34 (Rev. _____) Date Received: _____ DPO # _____

NOTICE OF OPERATIONS
DETAILED PLAN OF OPERATIONS
SUPPLEMENTAL INFORMATION FORM "C"
REFORESTATION PLAN EXAMPLE AND WORKSHEET

NOTE: This supplemental sheet must be completed for operations in Regions II and III unless the Area Forester gives a written reforestation exemption or the operator is making a land use conversion.

Regulations promulgated under the Alaska Forest Resources and Practices Act (AFRPA) requires harvested land in AFRPA Regions II and III to be reforested within seven years of harvest unless an extension is granted under 11 AAC 95.375 XX. The reforestation standards must be met by a sufficient ~~The~~ number of vigorous, well distributed ~~residual~~ commercial trees free from significant damage. Qualifying trees may be residual trees, new seedlings, or a combination of trees and seedlings approved by the division that meet the standards in 11 AAC 95 .375 (b)(4) and (d)(2). Regeneration ~~or combination of trees and seedlings approved by the division, must average 450 trees per acre and~~ must have survived on site a minimum of two years. Tree species considered by the Division for stocking purposes include Sitka spruce, white spruce, Lutz spruce, aspen, balsam poplar, western black cottonwood, and paper birch or other commercial species approved by the Division.

DETERMINATION OF RESIDUAL STOCKING LEVELS

To use this worksheet for reforestation planning, first estimate the number of residual commercial trees that will be left after timber harvest in each size class. Then divide, by ~~the~~ size class, the number of stems per acre needed to meet the minimum stocking standard found in 11 AAC 95.375(b)(4) into the estimated number of trees per acre left after harvest and multiply~~ing~~ by 100 to determine the stocking percentage. Percentages from each size class are then added to determine overall residual stocking levels. An example is provided as follows:

RESIDUAL STOCKING TABLE EXAMPLE

Average DBH (Diameter at breast height)	Residual Trees (Trees / acre)	Minimum Stocking Standard (Trees / acre)	Stocking %
~~>~~ >9"	20	120	17%
6" to 8"	30	170	18%
1" to 5"	60	200	30%
Total residual stocking	110		65%
Additional seedlings needed: 158			

DETERMINATION OF MINIMUM SEEDLING REQUIREMENTS

In the example given above with 65% residual stocking, 158 additional tree seedlings per acre will be needed to satisfy the minimum stocking requirement. This is determined by multiplying the minimum 450 ~~trees~~seedlings/~~-~~acre times the balance of the stocking percentage (35%) to

achieve the minimum stocking level. The required number of seedlings may be achieved through natural regeneration, planting or artificial seedling. The new trees must survive on the site for a minimum of two years within seven years of harvest.

RESIDUAL STOCKING CALCULATION TABLE

Average DBH (Diameter at breast height)	Residual Trees (Trees / acre)	Minimum Stocking Standard (Trees/ acre)	Stocking %
> 9”		120	%
6” to 8”		170	%
1” to 5”		200	%
Total Residual Stocking			%

SEEDLINGS REQUIRED

Percentage Under stocked = 100 – Total Residual Stocking %
Percentage Under stocked = 100 – _____ % = _____%

Seedlings/ Acre Required = Percentage Understocked/100 x 450
Seedlings/ Acre Required = _____% /100 x 450 = _____

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Date Received: _____
DPO # _____