NEPA Decision Worksheet

Permit #	06-172-01r
Institution	University of Washington
Organism	Aspen
Category	OO-- phytoremediation
Gene	cytochrome P450 2E1
1. Confinement	
Confinement and mitigation conditions have been reviewed and determined to be adequate	X
2. Threatened or Endangered Species or its habitat	
Resident or migratory in counties and harm to threatened or endangered species or habitat is likely	
Resident or migratory in counties and harm to threatened or endangered species is unlikely	X
None observed in area (no harm to threatened and endangered species)	
New or Novel	
3. New or Novel Crop	
Never used in a field trial	
Not new but no prior EA	
Not new and prior EA	X
4. New or Novel Trait (gene product)	
Never used in a field trial	
Not new but no prior EA	
Not new and prior EA	X
Raises new issues	
5. Cumulative Effects	
Cumulative effects likely	
Cumulative effects possible	
Cumulative effects unlikely	X
6. Plant Pollination	
Primarily bee or insect pollinated crop	
Primarily wind pollinated food or feed crop	
Primarily self fertilized food or feed crop	
Non-food or feed crop	X
7. Effects on Food/Feed Supply	
Known allergen, antinutritive, oral toxicant	
Food safety not established	X
GRAS status or approved food additive for native protein	
GRAS status or approved food additive for plant produced protein	
8. Isolation Distance	
AOSCA standard for crop	None
Proposed isolation distance	1 km* (see below)
9. Scale	
>100 acres/trait/crop/institution/year	
50-99 acres/trait/crop/institution/year	
10-49 acres/trait/crop/institution/year	
<10 acres/trait/crop/institution/year	X
10. Effects (positive or negative) on other species	
Significant effects expected/observed	
Minimal, non-cumulative effects expected/observed	
No effects expected/observed	X
11. Sexually Compatible Relatives	
Relatives within dispersal distance	X* (see below)
Relatives not within dispersal distance	
12. Seed Dormancy	
>3 years	
3 years	
2 years	
<2 years	X
13. Persistence in environment	
Crop can naturalize	X
Crop can persist 3-5 years without human intervention	
Crop does not persist without intervention	
14. Comments	

* Trees are not likely to flower during the proposed test period. Trees will be monitored for flowering and all flowers will be removed if they occur.

Additional supporting documentation is found in the summary risk assessment completed on July 25, 2006

JMC

Decision Document for Permit 06-172-01r

Based on my review of Permit 06-172-01r, I have made the following determinations:

- The listed threatened and endangered species known to be present in Pierce County, WA are plant species and as such will not be exposed to the plants in this trial. Therefore these field trials will not have adverse or other significant effects on threatened or endangered species.
- Field trials have been performed with transgenic aspen trees under APHIS authority and APHIS is familiar with aspen biology and methods to manage confined aspen field trials. The species hybrid used (*Populus tremula* X *Populus alba*) does not readily reproduce from cuttings in the field.
- The trials will be conducted in plastic lined test beds to manage water flow. This design will also prevent possible root sprouting outside the trial area.
- These trees typically do not flower until 4-7 years (or more) after planting. Flowering status of these trees will be monitored and these trees will not be allowed to produce viable pollen or seeds. If the trees do mature and show signs of flowering, they will be pruned to remove flowers and/or entire trees will be removed from the trial.
- Because all transgenic plant material will be removed from the test site and destroyed, there will be no foreseeable cumulative impacts resulting from multi-year field trials of these transgenic lines.
- The test bed site is fenced with locked gates that prevent ready public access.
- The proposed field trial is smaller than 10 acres. Trials of such small size are and have been easily monitored and confined to permitted areas.
- Aspen is capable of establishment in the wild, however, when the trials are concluded, the trees will be destroyed and not allowed to persist. Plant material will be chipped on site and allowed to dry prior to disposal. Chips will be analyzed for trichloroethylene (TCE) and other organic compounds and disposed of appropriately.

For the above reasons, APHIS has determined that (1) pursuant to 7 C.F.R. 372, the field trials proposed under permit #06-172-01r will not significantly affect the physical environment and (2) there are no applicable, extraordinary, or other reasonably foreseeable circumstances under which significant environmental effects could occur despite the protective and ameliorative measures specified above. Therefore, this field test is deemed confined within the meaning of 7 C.F.R. § 372.5.

Signed: _____/s/_____
Susan M. Koehler

Date: _____8/15/06__