

**PROPOSED MITIGATED NEGATIVE DECLARATION FOR  
CLEAN CLOSURE AND SOIL AMENDMENT PROJECT AT THE HELY CREEK  
WOODWASTE DISPOSAL SITE**

November 2009  
*with revisions incorporated Apr/May 2010*

**Applicant:**  
Humboldt Redwood Company, LLC  
125 Main Street  
P.O. Box 37  
Scotia, CA 95565

**Lead Agency:**  
County of Humboldt, Planning Department  
Clark Complex  
3015 H Street  
Eureka, CA 95501-4484

**Prepared by:**  
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**I. GENERAL INFORMATION**

1. **Project Title:** Clean Closure and Soil Amendment Project at the Hely Creek Woodwaste Disposal Site
  
2. **Lead Agency:**  
County of Humboldt, Planning Department  
Clark Complex  
3015 H Street  
Eureka, CA 95501-4484
  
3. **Project Location:**  
The project site is located approximately 5 miles southeast of the town of Carlotta, Humboldt County, California. The site lies within the north half of Section 5, Township 1 north, Range 2 east, Humboldt Base Meridian (HBM), Humboldt County Assessor's Parcel Number (APN#) 206-262-03. Access to the site is from a private road off of Highway 36. Figures 1 and 2 (Appendix A) are site vicinity and location maps.
  
4. **Project Applicant and Operator:**  
Humboldt Redwood Company, LLC  
125 Main Street  
P.O. Box 37  
Scotia, CA 95565
  
5. **Property Owner:**  
Humboldt Redwood Company, LLC  
125 Main Street  
P.O. Box 37  
Scotia, CA 95565
  
6. **General Plan Designation:**  
Timber Production (T)
  
7. **Zoning:**  
Timber Production Zone (TPZ)
  
8. **Agency Permit Requirements:**
  - a) Grading Permit (County of Humboldt)
  - b) Conditional Use Permit or Special Administrative Permit (County of Humboldt)
  - c) Well Abandonment Permit (County of Humboldt)
  - d) Waste Discharge Requirements (as issued by the Regional Water Quality Control Board)
  - e) Notice of Intent to be filed under the General Construction Stormwater Permit and SWPPP to be provided

**9. CEQA Requirement:**

This project is subject to the requirements of the California Environmental Quality Act (CEQA). The lead agency is the County of Humboldt. The purpose of an Initial Study is to provide a basis for deciding whether to prepare an EIR or a Negative Declaration. This Initial Study is intended to satisfy the requirements of the California Environmental Quality Act, CEQA, (Public Resources Code, Div 13, Sec 21000-21177), and the State CEQA Guidelines (California Code of Regulations, Title 14, Sec 15000-15387). CEQA encourages lead agencies and applicants to modify their projects to avoid significant adverse impacts (for example, CEQA Section 20180(c)(2) and State CEQA Guidelines Section 15070(b)(2) and discussion).

Section 15063(d) of the State CEQA Guidelines states the content requirements of an Initial Study as follows:

- (d) Contents. An Initial Study shall contain in brief form:
  - (1) A description of the project including the location of the project;
  - (2) An identification of the environmental setting;
  - (3) An identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries. The brief explanation may be either through a narrative or a reference to another information source such as an attached map, photographs, or an earlier EIR or negative declaration. A reference to another document should include, where appropriate, a citation to the page or pages where the information is found;
  - (4) A discussion of the ways to mitigate the significant effects identified, if any;
  - (5) An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls; and
  - (6) The name of the person or persons who prepared or participated in the Initial Study.

## **PROJECT DESCRIPTION<sup>1</sup>**

### **BACKGROUND**

#### ***Location***

The site is located approximately 5 miles southeast of the town of Carlotta, Humboldt County, California. The southern site boundary is located approximately 200 feet north of State Highway 36, and the eastern boundary is approximately 400 feet west of Redwood House Road (See Vicinity Map, Figure 1, Appendix A). The site lies within the north half of Section 5, Township 1 north, Range 2 east, Humboldt Base Meridian (HBM), Humboldt County Assessor's Parcel Number (APN#) 206-262-03. Access to the site is from a private road off of Highway 36.

#### ***Project Objectives***

The primary objective of the proposed project is to close the Hely Creek Woodwaste Disposal Site by completely removing the woodwaste from the waste management unit, processing/sorting the waste to remove uncharacteristic wastes, and applying the waste to the site as a silvicultural soil amendment.<sup>2</sup> A second objective of the proposed project is to monitor the effectiveness of the closure for a three year period or longer based on water quality results.

#### ***Site History***

The Hely Creek Woodwaste Disposal Site is a permitted woodwaste disposal landfill with an AB 1010 exemption. The site is zoned TPZ (Timber Production Zone), approximately three acres of which constitute the footprint of the unlined and uncovered waste management unit (WMU). The site began operations in the mid 1970's under the ownership of Louisiana Pacific. The Pacific Lumber Company purchased the site and operated it between 1987 and 1994. The site became inactive in September of 1994; the Waste Management Unit (WMU) was "closed" at that time, but has not been formally closed.

During its years of operation, the disposal site received approximately 80,000 cubic yards of non-hazardous woodwaste and other debris associated with log deck clean up from a nearby mill site. The material in the WMU consists of a mixture of woody debris, bark, sawdust, gravel, sand, silt, and soil generated by a sawmill and log decks in Carlotta. The site may also contain minor amounts of uncharacteristic wastes (concrete, metal, dimensional lumber, conveyor belts, etc.).

#### ***Related Permits and Studies***

The California Integrated Waste Management Board (CIWMB) issued a Solid Waste Facility Permit (SWFP 12-AA-0076) for the site in March 1980. Due to its AB 1010 exempt status the site is no longer regulated as a solid waste landfill by the CIWMB. Although it is not subject to the closure and financial assurance mechanism requirements, some elements of CCR Title 27 still apply.

The Humboldt County Planning Department issued the original Conditional Use Permit (CUP) to operate a woodwaste disposal site in 1979. During the re-permitting process (in 1991) the

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<sup>1</sup> Contents of this section derived from: *Work Plan for the Clean Closure and Soil Amendment Project at the Hely Creek Woodwaste Disposal Site*, Winzler & Kelly, March 2009.

<sup>2</sup> This method will eliminate the need for postclosure maintenance typically associated with a closed landfill.

County issued a letter stating that no CUP would be required given that operation of a woodwaste landfill is a principally permitted use of TPZ-zoned land. In a letter dated April 24, 2003 the Humboldt County Planning Department Director determined that the in-place closure of the landfill is allowable and approved a CUP for the clean closure project (though this permit did not obligate the clean closure of the landfill). The letter also required that a grading permit would have to be issued by the Humboldt County Building Department.

The project will comply with the Grading, Erosion Control, Geologic Hazards, Streamside Management Areas, and Related Ordinance Revision document issued by the Humboldt County Department of Community Development Services and Public Works in June 2002, and will require a grading permit.

The clean closure project shall comply with Sections 21090 and 21810 of Title 27, California Code of Regulations. The Local Enforcement Agency (LEA, Humboldt County Department of Environmental Health) and the Humboldt County Planning and Building Department (grading permit) also have some regulatory authority over the site. Annual reports are filed with the North Coast Regional Water Quality Control Board as part of the Waste Discharge Requirements (NCRWQCB).

The NCRWQCB issued the Waste Discharge Requirements (WDRs) (Board Order No. 91-52, Appendix A) for the site in April 1991. A clean closure and reuse plan was submitted to and approved by the RWQCB North Coast Region in 1996. The WDRs were updated and revised to reflect clean closure in 1996 (Board Order No. 97-5, Appendix A). The Plan called for the excavation, screening and incorporation of the materials in the WMU into a composting program. The Plan was abandoned in 2002 due to economic considerations. Bulk samples of the materials collected from the WMU documented insufficient percentages of woody materials to justify the costs to process and transport the materials for use as fuel or compost feedstock. The site has been maintained and monitored in compliance with WDRs 97-5 since that time.

An alternate clean closure and reuse concept was proposed to the NCRWQCB in 2002. It called for the excavation of the woodwaste, processing it to remove uncharacteristic wastes and then reusing the processed and sorted woodwaste as a silvicultural soil amendment at the site. At a meeting with the NCRWQCB, (June 29, 2004) the Pacific Lumber Company agreed to implement a pilot study to determine if the processed woodwaste would be suitable material for a silvicultural application, and to determine the chemical and physical characteristics of the leachate that would be generated by rainwater percolating through the material. In implementing this study, a test pad was constructed, trees were planted and leachate was collected and data analyzed. The methodology and results of the study were presented in the *Tree Growth Pilot Study Summary Report (Winzler & Kelly, Aug 2007)*.

The Study was completed and submitted to the NCRWQCB and the LEA, in August 2007. In October 2007, the Pacific Lumber Company was verbally encouraged by the NCRWQCB to submit a Report of Waste Discharge (Form 200) and supporting documentation. A Work Plan for the Clean Closure and Soil Amendment Project is being submitted as part of a Report of Waste Discharge. It describes the means and methods of excavation, processing, sorting, spreading, planting and monitoring that will be used.

In March of 2008, Pacific Lumber Company submitted the *Work Plan for the Clean Closure and Soil Amendment project at the Hely Creek Woodwaste Disposal Site* (prepared by Winzler & Kelly) to the NCRWQCB, Humboldt County Department of Environmental Health, and Humboldt County Planning and Building Department in compliance with California Code of Regulations, Title 27, Section 21810 (c) and Section 21090.

The most recent clean closure work plan was submitted to the NCRWQCB in January 2010. The document title is *Work Plan for the Clean Closure and Soil Amendment Project at the Hely Creek Woodwaste Disposal Site* (Winzler & Kelly, January 2010). This was rejected as incomplete by the NCRWQCB but via conference call we received feedback on their comments for edits to be made and we will resubmit all documents with changes once CEQA is complete. This will include a final Joint Technical Document addressing SWRCB and CIWMB regulations. A revised Form 200 and NOI for the general construction permit will be submitted in May 2010. We anticipate that revised WDRs will be approved at a NCRWQCB meeting before the end of 2010.

#### ***Environmental Monitoring and Control Systems***

Groundwater sampling is currently conducted at the site annually in April and surface water sampling is conducted twice yearly in March and December. Groundwater samples are analyzed for Chemical Oxygen Demand (COD), Electrical Conductivity (EC), Total Dissolved Solids (TDS), Turbidity, pH, and Calcium. Surface water samples are analyzed for COD, EC, pH, Settleable Solids, and Turbidity.

In July 1978, three monitoring wells were installed on site. In September of 1994, two additional groundwater monitoring wells and two piezometers were installed. These wells/piezometers were installed to monitor: (1) upgradient, colluvial groundwater, (2) upgradient, alluvial terrace groundwater, (3) the presence or absence of groundwater with the uppermost 5 feet of native soils (flood plain deposits) below the woodwaste/native soil contact, and (4) to determine if free water is in contact with woodwaste. The monitoring wells and piezometers have been surveyed by a California licensed surveyor.

In August 1991, nine test pits were excavated at the site to depths of up to approximately 9.5 feet below grade to determine the approximate extent of woodwaste deposited in the clearing (by previous owners/operators) outside the footprint of the existing woodwaste disposal site. In July 1994, six additional test pits were installed around the perimeters of the disposal site, and one test pit within the northern portion of the waste pile. In December 2006, eight additional test pits were excavated in the flat region outside of the eastern side of the WMU. The test pits data served as the basis for the determination on where existing woodwaste is located.

## **PROPOSED PROJECT**

The proposed project (clean closure of the Hely Creek Woodwaste Landfill) will consist of the following elements:

1. Site Preparation
2. Breakdown and Sorting (Processing)
3. Transporting and Spreading
4. Planting
5. Surface Water Drainage and Erosion Control
6. Environmental Monitoring
7. Postclosure Maintenance
8. Site Security

### ***Site Preparation***

The application areas shown on Figure 2, Figure 3, and Figure 4 (Appendix A) will be cleared of underbrush and woody debris (such as stumps) with a bulldozer. Large trees 8 inches in diameter at breast height will be left in place and the operations will work around them. The brush and woody debris throughout the site will be pushed into piles, ground up and transported offsite (possibly to Scotia for use as fuel at a power plant, to a local landscape supply outfit or another end user). The roadside ditch that drains the hillside adjoining the WMU will be cleaned out to ensure that any runoff will be directed through the sedimentation basin on the south side of the access road. The application area and exclusion zones (drainage ways, spring areas, the sedimentation basin and the debris flow) will be flagged.

There is an existing Caltrans road slide stockpile located on the site, shown in Figure 3. The material will be broken down and larger rock will be separated for use as site security barriers, smaller materials will be stock piled on site and included in site grading. Any uncharacteristic waste will be stockpiled and disposed of with waste from the breakdown and sorting of the WMU. (See section 4.2)

### ***Breakdown and Sorting (Processing)***

During this initial phase of the operation the WMU will be disassembled and uncharacteristic wastes (such as trash, conveyor belts, chunks of concrete, metal, dimensional lumber, and large pieces of wood) will be removed and stockpiled for further processing and transportation off site. A multi-stage sorting process (see Figure 5, Appendix A) will provide a number of opportunities to inspect the woodwaste and capture/remove uncharacteristic wastes. There will also be an independent, third-party inspector part of the time to verify and document the removal of the uncharacteristic wastes.

As this is a wood waste landfill, there is a possibility of lumber and large woodwaste in the WMU. Any lumber that is greater than 12 inches long in any one dimension or branches more than 2 inches thick will be separated, mechanically processed to appropriate size, or removed for offsite processing and disposal. Onsite processing of the lumber may include a grinder or chipper. After the lumber has been processed it may be blended in with the soil amendment, transported for power plant fuel or disposed/reused in some other manner. There will be a number of opportunities to inspect the woodwaste and capture/remove uncharacteristic wastes.

There will also be an independent, third-party inspector present approximately 50% of the time to verify and document the removal of the uncharacteristic wastes.

Using the bulldozer and working from the top of the pile, woodwaste will be pushed down off the pile and into a designated sorting lane. The material will roll and be spread out as it is pushed along the sorting lane (approximately 100' long and 12' wide) exposing all parts of the volume being pushed. There will be two sorting lanes utilized during deconstruction. The sorting lanes will be designated with survey staking, flagging tape, and cones. Woodwaste will be rolled into one of the sorting lanes while the other sorting lane is visually inspected for uncharacteristic waste. The woodwaste will be spread no more than one foot deep in the sorting lane to allow for proper inspection and sorting. The depth of material in the sorting lanes will be indicated by flagging tape attached, at a height of one foot above the ground, to the survey stakes that delineate the sorting lanes. The inspector will use a metal detector to screen the waste. The inspector will identify any uncharacteristic and it will be removed by hand or a micro-excavator will pick out the items. After the sorting lane has been inspected, the material will be pushed to the intermediate stock pile at the far end of the sorting lane. Additionally, an excavator will sit on top of the stockpiled materials watching the sorting lanes and radioing the bulldozer operator if he sees uncharacteristic wastes. The bulldozer will push the materials out of the sorting lane and a micro-excavator will pick out the items to be removed.

During the deconstruction of the WMU unmixed pockets of material may be encountered. Based on the characterization of the waste from the numerous test pits and piezometer well drilled in the WMU, these unmixed pockets of material are not expected to be extensive. The sorting process offers three opportunities to accomplish mixing and blending of the material:

1. During deconstruction – The bulldozer will push material off of the WMU into the sorting lane. If homogenous pockets of material are found in one location the operator will incorporate mixed material from other sections of the WMU.
2. During sorting lane spreading – The woodwaste material will spread out over a 100 foot length at 12 feet wide and one foot deep. After the material has been inspected it will be pushed and rolled to the intermediate stockpile. This spreading, pushing, and rolling offers another mixing of the material.
3. During intermediate stockpile loading – Once the material is stockpiled it will be loaded into haulers or pushed to the final spreading area. Further mixing of the material will be achieved through the loading, pushing, and spreading process.

The excavator will load trucks from the top of the sorted stockpile. This will provide another opportunity to detect and remove uncharacteristic wastes. The micro-excavator will also have access to the exposed face of the WMU from which it can remove uncharacteristic wastes. The trucks will haul the sorted woodwaste (now considered a soil amendment) to the spreading area and spread it out. These piles will be inspected by an independent, third-party observer and uncharacteristic wastes will be pulled out or flagged for removal by heavy equipment. The independent observer will also watch the spreading operation providing one last opportunity to find and remove uncharacteristic wastes. A final inspection by a professional engineer of the entire surface of the application sites will be done after the spreading operation is complete.

Radios will be used to communicate and coordinate the efforts of the micro-excavator, the excavator, the bulldozer and the independent observer in capturing and removing uncharacteristic wastes.

The uncharacteristic wastes will be pulled out using the micro-excavator and stockpiled, segregated by materials type and then shipped offsite for appropriate disposal or reuse. The removal and hauling shall occur prior to the onset of winter rains.

#### ***Destruction of Existing Piezometers and Monitoring Wells in the WMU***

There are two piezometers and one monitoring well (MW-4) within the existing WMU. These will be destroyed during the WMU deconstruction process. The destruction of the wells will require a permit issued by the Humboldt County Department of Health and Human Services, Division of Environmental Health (HCDEH). The destruction of the piezometers will be achieved during the breakdown of the WMU and the PVC material will be removed during the sorting process. The abandonment and destruction of MW-4 poses a problem as the well penetrates the WMU and extends into the soil unit below the WMU. Normal abandonment requires either over drilling and grouting or pressure grouting the well. Both methods would introduce uncharacteristic waste that would have to be removed during the deconstruction and sorting process and may damage the seal in the soil unit below the existing WMU. The well destruction method used will have to be approved by HCDEH and will be specified at the time the well destruction permits are issued.

#### ***Possible Contamination in the WMU Materials***

Encountering soil contamination is not expected but is possible. Soil contamination could be caused by leaking buried drums, leaking equipment, or other unauthorized releases. Based on probable industrial process, possible contaminants may include: petroleum hydrocarbons (gas and diesel), solvents, or wood preservatives. Evidence of contamination may be recognized by staining of soil, odor, or oily sheen. If buried drums or evidence of possible contamination is discovered, operators will investigate surrounding soil prior to further excavation and immediately notify the construction foreman or site supervisor. The site supervisor will notify the regulatory agencies and quarantine the possible area of contamination prior to any further activities. Construction contractors shall have Visqueen and erosion control materials for contamination containment available onsite at all times during construction.

#### ***Construction Documentation and Third Party Verification***

Verification of the WMU deconstruction, sorting, and spreading processes is an important component of the site closure plan. To perform the verification, daily construction logs, photo logs, sorted uncharacteristic waste manifests, and monthly summary reports will be generated.

Third party reviewers will observe the deconstruction, sorting, and spreading process. They will also be responsible for reviewing the daily logs, photo logs, and waste manifest. The third party reviewers will be onsite daily in the early stages of construction and less frequently after the deconstruction, sorting, and spreading process has been established. Third party personnel will be onsite approximately 50% of the time during construction.

Daily construction logs will comply with Title 27 standards and include:

- Daily work orders,
- Daily site conditions,

- A sketch showing cut areas, sorting lanes, processing areas, and spreading areas,
- Approximate volume of WMU material processed and spread,
- Labor working at the site,
- Equipment used,
- Visitors, and
- Any other comments

Photographic documentation of the deconstruction, sorting, and spreading shall occur daily. Photographs will be taken daily and document the extent of the sorting lanes and sorting activity. Photographs will be recorded in a photograph log and may be referenced by the daily logs.

As uncharacteristic waste is removed and stockpiled during the sorting process, the type and quantity will be recorded on the waste manifest. The manifest shall indicate how the waste is to be processed. Large rock will be stockpiled and used onsite, dimensional lumber and branches may be processed onsite (grinder or chipping) and spread or hauled offsite. Concrete and metal shall be hauled offsite for proper disposal or recycling.

A monthly report will be prepared by the 10th of each month that summarizes the activities and quantities of WMU material processed and uncharacteristic waste removed from the site during the previous month.

### ***Spreading***

Two application/spreading areas have been designated (see Figure 2, Appendix A). The primary spreading area will be used first (Figure 3, Appendix A). The secondary spreading area will only be used if the primary spreading area reaches its maximum capacity (Figure 4, Appendix A). The material will be spread to a maximum of three feet (3') deep in either area. It should be noted that there may be buried woodwaste predating the PALCO operations in the meadow in the primary spreading area.

After the material has been pushed through the sorting lane and into the stockpile it will be transported to the primary application site on the meadow and hillside or to the secondary application site. Depending on the distance between the sorted pile and the application site, the material will either be pushed with the bulldozer or loaded onto a truck.

Once it arrives at the application site, it will be spread with a bulldozer allowing additional mixing and sorting to occur. A second micro-excavator will be used to remove any large waste that was not previously discovered. The bulldozer will push the material up the hill between any watercourses and avoid any springs or seeps identified in the Plan or discovered in the field. The existing ditch at the toe of the hillside will unavoidably be covered and filled with the woodwaste/soil mixture. This will be remedied after the spreading is complete (see below).

The material will be spread to a maximum of three feet (3') deep on the meadow area where there may be buried woodwaste predating the PALCO and/or HRC operations. An exclusionary zone (100' setback from the top of bank) will be flagged. No soil amendments will be spread in this area. A maximum of six feet (6') of soil amendments will be spread over native soil and areas that do not have any buried woodwaste. The thickness of the application will be controlled with grade staking and monitored by an independent observer. The soil amendments will not be

spread in surface watercourses, in springs or in the landslide portion on the hillside. The landslide is the result of a portion of the bluffs to the north of the landfill failing during a rainstorm in 2006.

### ***Planting***<sup>3</sup>

After the first rains, the entire application site will be planted in a mixture of coast redwood, Douglas Fir, and red alder at ratios determined by a forester. The trees will be bare-root or plug stock at least 2 years old. Approximately one tablespoon of pelletized fertilizer will be placed in each hole to stimulate root growth during the first year. Vexar tubing will be installed with each tree to control browse damage by deer. Cardboard mulch collars may be installed around the trees to prevent the growth of grass next to the trees and to preserve moisture around the roots.

The trees shall be planted within the planting area in a grid pattern designated by an HRC representative. It is understood that tree placement is more important than strict uniform tree spacing. Therefore, a plus or minus two foot allowance shall be observed where planting placement is a concern. Where possible, trees shall be planted on the shady side of logs, stumps and rocks, and in cleared areas of moist, stabilized mineral soil. Trees shall not be planted in loose soil subject to drying as on road berms or waterbars or in compacted soil as in the center of roads, accumulations of bark or woody debris, or in permanent roadways.

All planting shall be done with a shovel unless otherwise approved by the Company inspector in advance. The blade shall be a minimum of twelve (12) inches in length. Before digging the planting hole, all debris shall be cleared away to expose bare moist mineral soil in a spot at least one (1) foot in diameter. Debris to be removed includes ashes, duff, wood, loose rock, snow, and surface frost. This does not constitute a scalping fee for the unit.

When live vegetation is present, an HRC representative shall approve and instruct Contractor to scalp a one (1) foot diameter area to bare mineral soil. Roots shall be spread out in their natural position, and shall not be twisted, tangled, compacted or curled at the ends. Only moist soil shall be placed against the roots. Dry soil, rocks, leaves, twigs, etc., shall be kept out of the hole. Trees should be planted at the same depth that they were growing at the nursery. Trees should not exhibit exposed roots or buried branches.

The tree shall stand erect and perpendicular to the horizontal plane. Soil should be firmly packed around the roots so that there are no air pockets. No trees shall be planted within ten (10) feet of roads or landings subject to management activities. Improper placement of trees under organic debris or other substrate shall not occur. Planted trees shall be spaced off both redwood and hardwood stumps at a predetermined distance established by Company prior to planting. Natural Douglas-fir and redwood regeneration of good form and vigor shall be spaced at 10 (ten) feet unless otherwise stated by HRC.

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<sup>3</sup> A study conducted in 2007 at the site (*Tree Growth Pilot Study Summary Report [Winzler & Kelly, Aug 2007]*) concluded that the woodwaste contained within the disposal site's WMU is a suitable growing media for Redwood, Douglas Fir and alder trees. This was supported by laboratory analysis of samples sent to the Soil and Plant Lab, in Santa Clara, CA. Also, seedlings planted on the test pad grew as well as those planted in native forest soils and better than those planted on the alluvial flat adjacent to the creek.