EMR
INCORPORATED
ENVIRONMENTAL MANAGEMENT RESOURCES

April 25, 2003

Kelly B. Peterson
City of Kent
Environmental Engineering Department
220 4th Avenue South
Kent, Washington 98032-5895

REFERENCE: Final Wetland Delineation Report
Maralco Aluminum Company Property in Kent, Washington.
EMR Proj. #6070.001-1

Dear Mr. Peterson:

Environmental Management Resources, Inc. (EMR) is submitting the enclosed Final Wetland Delineation Report prepared by Wetlands, Inc. for your approval. The report addresses wetland areas on the Former Maralco Aluminum Company property located at 7730 South 202nd Street in Kent.

Please call us at (425) 861-4561 with any questions or comments.

Very Truly Yours,

Christina Merten, PE
Project Engineer

cc: Bob Whitefield– Wetlands, Inc.
Dale Frank – Brown Dog Investments

Attachments

2509 152nd Ave. NE, Suite E ▼ Redmond, WA 98052 ▼ (425) 861 4561 ▼ FAX (425) 869-7820

WETLANDS, INC.
720 SHELTER BAY DRIVE
LA CONNER, WASHINGTON 98257
PHONE/FAX: 360-466-1412

REVISED WETLAND DELINEATIONS FOR

EMR INCORPORATED
2509 152ND AVENUE NE, STE. E
REDMOND, WASHINGTON 98052-5548

MARALCO SITE
KENT, WASHINGTON

APRIL, 2003

1. SITE DESCRIPTION

This is a 13 acre industrial property located at 7730 South 202 Street in Kent, Washington. It is in the NE1/4 of the SE1/4 of Section 1, Township 22 North, Range 4 East. It is bounded on the north by S 202 Street, on the east by 80 Avenue S, on the south by adjacent industrial buildings, and on the west by Burlington Northern Railroad tracks.

Entering the property near the northeast corner is Christopher Ditch, listed by the City of Kent as a Minor Stream. The stream flows in a SW trajectory for about 450 feet, then turns in a NW trajectory where it flows off the property through a drain pipe. An unnamed Minor Stream enters the property through a drain pipe from the center southwest portion of the property and flows into Christopher Ditch before it exits the property. The caretaker of the property states that Christopher Ditch dries up in the summer months.

Christopher Ditch and its tributary are generally located in the eastern 5.9 acres of the property. The rest of the property is made up of industrial buildings, warehousing, distribution, and parking areas. Also found in the western half of the property are large piles of waste material including black dross, furnace slag, and baghouse dust. This property is considered a Hazardous Waste site by the Department of Ecology.

The wetlands on this property are found along the sides of, and in Christopher Ditch and its tributary. This wetland is designated as Wetland A. It is 49,227 square feet is size and is a Category 2 wetland under Kent City Code. This wetland requires a 50 foot buffer from the wetland edge plus a 15 foot setback (BSBL) from the outer edge of the 50 foot wetland buffer. 2 — Building Setback Line

Christopher Ditch is a Minor Stream per KCC and requires a 25 foot buffer from the stream. It is noted that the 50 foot wetland buffer extends 25 feet beyond the stream's buffer therefore, the streams buffer is superceded by the greater wetland buffer.

The wetlands are vegetated and dominated with wetland grass and herbaceous plants. A small forested portion of the wetland extends into the site from a neighboring property. The soils of the wetlands are of the Woodinville series which are quite commonly found in the stream beds of King County in the lower elevations. The upland soil of the site is the Renton silt loam series. This soil is well drained and is sandy in the B horizon. North of Christopher Ditch, some of the Renton silt loam area had black dross compacted into the A horizon which accounts for the Reed canarygrass that is found there. This area is not a wetland.

We have also mapped a small Category 3 Wetland that is north and off the property. A very small amount of the 15 foot BSBL extends into the property.

2. WETLAND SITE ASSESSMENT

This wetland site assessment was prepared in accordance with Corps of Engineers methodology and the Kent City Code, Chapter 11.05.

a. VEGETATION

The vegetation of the wetland is dominated by:

80% Reed canarygrass, Phalaris arundinacea, FACW
5% Giant horsetail, Equisetum telmateia, FACW
5% Creeping buttercup, Ranunculus repens, FACW
5% Poa palustris, Kentucky bluegrass, FAC
3% Populus trichocarpa, Black cottonwood, FAC
2% Typha latifolia, Cattail, FACW

The vegetation of the upland soil is dominated by:

50% Rubus laciniatus, Evergreen blackberry, FACU
25% Festuca arundinacea, Tall fescue, FACU
15% Festuca rubra, Red fescue, FAC
10% Poa palustris, Kentucky bluegrass, FAC

b. SOILS

The USDA Soil Survey of King County has mapped the upland areas of the property as Renton silt loam. Our Soil Pits 1 and 3 characterizations agree with this mapping unit. We find a matrix color in the A horizon of 10YR3/2 to 8 inches. The texture is a silt loam. No mottles are present. The B horizon transcends to 2.5Y 4/4 and is a very fine sandy loam to 16 inches. This is a well drained soil. It is a Mollic fluvaquents in Hydrologic Group and is Non-hydric.

The wetland soil is Woodinville silt loam which is commonly found along drainage ways and stream bottoms in King County. The USDA Soil Survey of King County has mapped this soil in the area and we find Woodinville silt loam to be the soil in and along side of Christopher Ditch and the tributary. Soil Pits 2 and 4 show the locations on the accompanying map. We find a shallow dark silty clay loam A horizon with a matrix of 10YR 2/1 to 8 inches. The B horizon gray silty clay loam, 5Y 6/1 with mottles at 7.5YR 4/3 to 20 inches. This is an Aeric fluvaquents in Hydrologic Group D and is a Hydric soil.

c. WETLAND HYDROLOGY

The Woodinville soils are very wet. They have standing water to saturation to 20 inches. The histic epipedon is present as well as mottling in the B horizon. Drift lines are present along the adjacent vegetation of the Ditches.

d. WETLAND DETERMINATION TABLES

PLOT #	VEGETATION	SOIL	WETLAND HYDROLOGY
1	Negative	Negative	Negative
2	Positive	Positive	Positive
3	Negative	Negative	Negative
4	Positive	Positive	Positive

e. SUMMARY

This property is a Hazardous Material site contaminated by heavy metals. The Upland areas are a well drained silt loam with a deep very fine sandy loam. Christopher Ditch, its tributary and the Woodinville silt loam adjacent to the Ditches comprise the wetlands. Wetland flaggings A1 through A49 delineates the wetland edges. Christopher Ditch and its tributary is a Minor Stream under KCC 11.05 and requires a 50 foot buffer from the wetland edge plus 15 feet baseline setback to the nearest construction.

Respectfully submitted,

Robert O. Whitefield
Wetlands, Inc.

DATA FORM 1

WETLAND DETERMINATION

Applicant Name: EMR, INC Application Number: 03-1 Project Name: MARALCO SITE

State: WA County: KING Legal Description: Township: 22 Range: 4E

Date: 1-22-03 Plot No.: SP1 Section: 1

Vegetation [list the three dominant species in each vegetation layer (5 if only 1 or 2 layers)]. Indicate species with observed morphological or known physiological adaptations with an asterisk.

Species	Indicator Status	Species	Indicator Status
Trees		**Herbs**	
1.		7. FESTUCA ARUNDINACEA	FACU
2.		8. FESTUCA SPP.	FACU
3.		9.	
Saplings/shrubs		**Woody vines**	
4. RUBUS LACINIATUS	FACU+	10.	
5.		11.	
6.		12.	

% of species that are OBL, FACW, and/or FAC: <10. Other indicators: _____.

Hydrophytic vegetation: Yes ___ No X. Basis: >80% ARE FACU

Soil

Series and phase: RENTON SILT LOAM On hydric soils list? Yes ___; No X.

Mottled: Yes ___; No X. Mottle color: _____; Matrix color: 10YR 3/2

Gleyed: Yes ___ No X Other indicators: _____.

Hydric soils: Yes ___ No X; Basis: WELL DRAINED SAND TO 20" IN B HORIZON

Hydrology

Inundated: Yes ___; No X. Depth of standing water: _____

Saturated soils: Yes ___; No X. Depth to saturated soil: > 30"

Other indicators: _____.

Wetland hydrology: Yes ___; No X. Basis: INDICATORS NOT PRESENT

Atypical situation: Yes ___; No Y.

Normal Circumstances? Yes Y No ___.

Wetland Determination: Wetland _____; Nonwetland X.

Comments:

Determined by: B. WHITEFIELD

DATA FORM 1

WETLAND DETERMINATION

Applicant Name: EMR INC Application Number: 03-1 Project Name: MARALCO SITE

State: WA County: KING Legal Description: Township: 22N Range: 4E

Date: 1-22-03 Plot No.: SP2 Section: 1

Vegetation [list the three dominant species in each vegetation layer (5 if only 1 or 2 layers)]. Indicate species with observed morphological or known physiological adaptations with an asterisk.

Species	Indicator Status	Species	Indicator Status
Trees		Herbs	
1.		7. PHALARIS ARUNDINACEA	FACW
2.		8. RANUNCULUS REPENS	FACW
3.		9. POA PALUSTRIS	FAC
Saplings/shrubs		Woody vines	
4.		10.	
5.		11.	
6.		12.	

% of species that are OBL, FACW, and/or FAC: 780. Other indicators: _____.

Hydrophytic vegetation: Yes X No ___. Basis: >80% OF DOMINANTS ARE FACW

Soil

Series and phase: WOODINVILLE On hydric soils list? Yes Y ; No ___.

Mottled: Yes X ; No ___. Mottle color: 5YR 5/3; Matrix color: 10YR 2/1.

Gleyed: Yes ___ No X Other indicators: _____.

Hydric soils: Yes X No ___; Basis: REDOXIMORPHICATION.

Hydrology

Inundated: Yes X ; No ___. Depth of standing water: 0-1

Saturated soils: Yes X ; No ___. Depth to saturated soil: 0-10

Other indicators: DRIFT LINES IN VEGETATION.

Wetland hydrology: Yes X ; No ___. Basis: INDICATORS PRESENT

Atypical situation: Yes ___; No V.

Normal Circumstances? Yes V No ___.

Wetland Determination: Wetland X ; Nonwetland ___.

Comments:

Determined by: B. Whitefield

DATA FORM 1

WETLAND DETERMINATION

Applicant Name: EMR, INC Application Number: 03-1 Project Name: MARALCO SITE

State: WA County: KING Legal Description: Township: 22N Range: 4E

Date: 1-23-03 Plot No.: SP3 Section: 1

Vegetation [list the three **dominant** species in each vegetation layer (5 if only 1 or 2 layers)]. Indicate species with observed morphological or known physiological adaptations with an asterisk.

Species	Indicator Status	Species	Indicator Status
Trees		**Herbs**	
1.		7. FESTUCA ARUNDINACEA	FACU
2.		8. FESTUCA SPP	FACU
3.		9.	
Saplings/shrubs		**Woody vines**	
4. RUBUS LACINIATUS	FACU+	10.	
5.		11.	
6.		12.	

% of species that are OBL, FACW, and/or FAC: <10. Other indicators: _____.

Hydrophytic vegetation: Yes ____ No X. Basis: >80% ARE FACU.

Soil

Series and phase: RENTON SILT LOAM On hydric soils list? Yes ____; No V.

Mottled: Yes____; No X. Mottle color: _____; Matrix color: 10YR 3/2 - 7.5YR 5/8

Gleyed: Yes____ No X Other indicators: _____

Hydric soils: Yes____ No X; Basis: WELL DRAINED SAND TO 20" IN B HORIZON

Hydrology

Inundated: Yes____; No X. Depth of standing water: > 30"

Saturated soils: Yes____; No X. Depth to saturated soil: N/A

Other indicators: _____

Wetland hydrology: Yes____; No X. Basis: INDICATORS NOT PRESENT

Atypical situation: Yes____; No V.

Normal Circumstances? Yes Y No____.

Wetland Determination: Wetland _____; Nonwetland X.

Comments:

Determined by: B Whitefield

DATA FORM 1

WETLAND DETERMINATION

Applicant Name: EMR, Inc. Application Number: 03-1 Project Name: MARALCO SITE

State: WA County: KING Legal Description: Township: 22N Range: 4E

Date: 1-23-03 Plot No.: SP4 Section: 1

Vegetation [list the three dominant species in each vegetation layer (5 if only 1 or 2 layers)]. Indicate species with observed morphological or known physiological adaptations with an asterisk.

Species	Indicator Status	Species	Indicator Status
Trees		**Herbs**	
1. POPULUS TRICHOCARPA	FAC	7. PHALARIS ARUNDINACEA	FACW
2.		8. RANUNCULUS REPENS	FACW
3.		9. EQUISETUM TELMATEIA	FACW
Saplings/shrubs		**Woody vines**	
4. TYPHA LATIFOLIA	FACW	10.	
5.		11.	
6.		12.	

% of species that are OBL, FACW, and/or FAC: 80% Other indicators: _____.

Hydrophytic vegetation: Yes X No ____. Basis: 80% OF DOMINANTS ARE FACW

Soil

Series and phase: VINDY/ANVILLE On hydric soils list? Yes Y ; No ____.

Mottled: Yes X ; No ____. Mottle color: SYR 5/8 ; Matrix color: 10YR 3/2.

Gleyed: Yes ____ No X Other indicators: REDOX.

Hydric soils: Yes X No ____; Basis: REDOX MORPHOLOGY/CLASSIFICATION.

Hydrology

Inundated: Yes X ; No ____. Depth of standing water: 0-2

Saturated soils: Yes X ; No ____. Depth to saturated water: 0-12

Other indicators: DRIFT LINES IN VEGETATION.

Wetland hydrology: Yes X ; No ____. Basis: INDICATORS PRESENT.

Atypical situation: Yes ____; No Y.

Normal Circumstances? Yes Y No ____.

Wetland Determination: Wetland X ; Nonwetland ____.

Comments:

Determined by: [signature]