

Appendix D

HUG Public Safety Committee Recommendations

HUG PUBLIC SAFETY COMMITTEE

Committee Members

Ted Handrick - Wisconsin Public Service Corporation
Tom Plante - Wisconsin Electric Power Company
Roy Urban - Consolidated Water Power Company
Mark Fort - Northern States Power Company
Roy Perry - Wisconsin Power & Light Company
Sam Morgan - Wisconsin Valley Improvement Company
Mark Wesolowski - Wisconsin Valley Improvement Company
Andy Blystra - Thunder Bay Power Company

UNIFORM SIGNING AND WARNING DEVICE RECOMMENDATIONS

Committee Directive

Develop recommendations for a uniform signing and warning device system in response to requests from HUG and WDNR.

Sign Recommendations

Warning Signs

- Diamond Shape
- 2'x2' Minimum Size
- 7.25" Minimum Letter Size (NR 330)
- 2" Minimum International Orange Border (NR 330)
- Black Lettering on White Reflective Background
- Use for "DAM" and "THIN ICE"

Information Signs

- Square Shape
- 2'x2' Minimum Size
- 7.25" Minimum Letter Size (NR 330)
- 2" Minimum International Orange Border (NR 330)
- Black Lettering on White Reflective Background
- Use for "TAKE OUT" and "CANOE PORTAGE"

Message Signs

- Diamond Shape
- 4' x 4' Minimum Size
- Maximum Letter Size
- 4" Minimum International Orange Border
- Black Lettering on White Reflective Background
- Use for Additional Warning Messages
- Message to be Concise and Site Specific

Letter Style

Should be the modified block for distinction and easy reading.

Reflective Background

- Will increase visibility in poor light conditions and during hours of darkness.
- "Thin Ice" signs mounted at locations remote from the dam structure must have reflective background.

Lighted Signs

Regulation "Dam" and "Thin Ice" signs mounted on the dam structure shall be positioned to take advantage of illumination for nighttime visibility.

Canoe Portage Trail Signs

- Rectangular Shape
- 12" x 18" Minimum Size
- Cross Paddles Design - with or without direction arrows (Attachments 1 & 2)
- Brown on Yellow

Conversion to sign standards will be as required in the replacement of old signs or the installation of new signs.

Upstream Restraining Barriers

Installation is recommended at all dams. Design and placement to be determined by site specific conditions.

Warning Devices

Lights

- Amber Strobe
- Use for Gate Operation
- Remain on for Duration of Gate Opening
- Mount for Visibility both Upstream and Downstream

Convert present warning lights to amber strobe as replacement is required or as dictated by changing conditions/operations.

Siren

- Primarily for Gate Operation and Generator Start-up
- Downstream Warning Systems Where Required

Gate Operation

- Recommended minimum warning period prior to gate opening is 4-5 minutes with a 30 second sounding period for each minute of delay.
- Actual length of warning period shall be based on site specific conditions.
- Anytime the gate changes position in the open direction the siren should sound; this is a site specific option.

Generator Start-Up

- The need for a siren in the plant tailrace is based on site specific considerations.
- Recommended minimum warning period prior to generator start-up is 2 minutes with (3) 10-second soundings or equivalent.
- Actual length of warning period shall be based on site specific conditions.
- A lighted message sign explaining the purpose of the siren shall be placed in an appropriate location in the plant tailrace area.

Siren tone signal is Federal Signal "Yeow".

Recognizing that siren soundings in a residential area may be commonplace as well as a nuisance, the more frequent shorter soundings may be more desirable than a longer blast.

Conversion to siren as replacement is required and recommended for standardizing the identity of this warning.

Lights and sirens are recommended for warning of gate operation.

Downstream Warning System

- The need and type siren will be dictated by site specific downstream conditions.
- Siren tone signal is Federal Signal "Temporal Slow" (whoop).

The recommendations as presented by the committee are intended to be minimum requirements necessary to safeguard the general public. Refer to Wisconsin Administrative Codes NR 5 and NR 330 for further guidance.



T. F. Handrick
HUG Public Safety Committee Chairman

REGULATION SIGN SUPPLIERS

Vendor By Material Specifications

Aluminum - White Reflective Background

Wardco Safety, Inc.
N115 W18835 Edison Drive
P. O. Box 307
Germantown, WI 53022
(414) 251-6730

Orde Advertising Company
300 South Taylor Street
P. O. Box 11595
Green Bay, WI 54307-1595
(414) 498-8410

Smith & Nephew Rolyan, Inc.
N93 W14475 Whittaker Way
P. O. Box 555
Menomonee Falls, WI 53052-0555
(414) 251-7840

Duroply - White Reflective Background

Signs by Wallace
U. S. Hwy. 141 N15215
Amberg, WI 54102
(715) 759-5314

Wardco Safety, Inc.
N115 W18835 Edison Drive
P. O. Box 307
Germantown, WI 53022
(414) 251-6730

City Outdoor Advertising, Inc.
1860 Backer Drive
Wisconsin Rapids, WI 54494
(715) 423-4545

Orde Advertising Company
300 South Taylor Street
P. O. Box 11595
Green Bay, WI 54307-1595
(414) 498-8410

Fiberglass

Orde Advertising Company
300 South Taylor Street
P. O. Box 11595
Green Bay, WI 54307-1595
(414) 498-8410

Wardco Safety, Inc.
N115 W18835 Edison Drive
P. O. Box 307
Germantown, WI 53022
(414) 251-6730

PVC - Vinyl Lettering

Instant Sign Factory
426 South Broadway
Green Bay, WI 54303
(414) 435-4335

Orde Advertising Company
300 South Taylor Street
P. O. Box 11595
Green Bay, WI 54307-1595
(414) 498-8410

Federal Signal Device Listing

Amber Strobe Light - Model 371 DST Heavy Duty Commander Light - Double Flash Strobe

Siren - Selectone Model 302 GC Audible Signal Device

Tone Modules - Selectone TM5 "yeow" (Dam & Tailrace)
Selectone TM11 "Slow Whoop" (Downstream)
TM12 "Westminster Chime" (Test)

Federal Signal Equipment Suppliers

Englewood Electrical Supply - Green Bay & Wausau

Graybar Electric Co. Inc. - Green Bay

Murphy Supply Co. Inc. - Green Bay