

U.S. Fish and Wildlife Service
Marquette Biological Station
3090 Wright Street
Marquette, Michigan 49855
U.S.A.

and

U.S. Fish and Wildlife Service
Ludington Biological Station
5050 Commerce Drive
Ludington, Michigan 49431
U.S.A.

and

Department of Fisheries and Oceans
Sea Lamprey Control Centre
1219 Queen Street East
Sault Ste. Marie, Ontario P6A 2E5
Canada

ADMINISTRATIVE OPERATING PROCEDURE

PROCEDURE TITLE:

Training Procedures and Records

APPLICABILITY:

Procedures apply to all personnel performing lampricide treatments.

PURPOSE:

To ensure a basic core of training for all personnel.

PROCEDURE:

- I. Training Prior to Field Season (where applicable)
 - A. Ensure employee is familiar with facilities and Station Safety Plan.
 - B. Ensure employee is trained in use of shop power tools and shop safety.
 - C. Ensure employee is trained in lamprey and fish identification.
 - D. Ensure employee completes cardiopulmonary resuscitation (CPR) and first aid training.
 - E. Ensure employee completes defensive driving course.
 - F. Ensure employee completes Workplace Hazardous Materials Information System (WHMIS) training.

- G. Ensure employee completes respirator training.
 - H. Ensure employee views videos on water safety.
 - I. Ensure employee views video on automotive winch use and safety.
 - J. Ensure employee completes electrofishing procedures and safety.
 - K. Ensure employee views videos on Lymes Disease.
 - L. Ensure employee completes All-Terrain Vehicle/Off Road Utility Vehicle (ATV/ORUV) training.
 - M. Ensure employee completes boat training and safety course.
 - N. Ensure employee studies provincial pesticide training manuals and passes exams.
 - O. Ensure employee is familiar with and practices driving assigned vehicles and trailers. Vehicle check lists are reviewed.
 - P. Ensure employee is trained in the procedures for Transportation of Dangerous Goods.
 - Q. Ensure employee completes Marine Radio Operator's certification.
 - R. Ensure employee completes chain saw course.
- II. Training the first Month of Field Season (where applicable)
- A. Ensure employee is familiar with the use of lampricides.
 - 1. Employee is trained in use of personal protective equipment.
 - 2. Employee is trained in pesticide spill procedures.
 - B. Ensure employee is familiar with and practices using lampricide application pumps and equipment and with preparing application sites.
 - C. Ensure employee is trained in stream gauging procedures. After initial familiarization with equipment and procedure, the training proceeds to the field for hands-on experience.
 - D. Ensure employee is trained in water chemistry procedures and procedures for operation of pH meters and automatic pipettes.
 - E. Ensure employee is trained in procedures for TFM analysis, and in procedures for operation of spectrophotometers.
 - F. Ensure employee is trained in fluorescent dye studies, and procedures for operation of the fluorometer.
 - G. Ensure employee is trained in procedures for operation of ISCO water samplers.
 - H. Ensure employee is informed of proper procedures in working with the public and landowners.

III. Training Records and Implications

- A. Pre-field season training is documented by signing attendance records at the time of training and time of viewing of videos or films. The signed attendance records are maintained for WHMIS, trailering, tire changing, and daily vehicle inspection, and other training videos. Other training is documented on the Training Documentation Form (attachment). Supervisors initial for required training on the form, employees initial and date upon completion of training, and instructors initial and date when the training is successfully completed. Where applicable, expiry dates for certification are recorded.

Supervisors ensure that employees have completed all required training. If training has not been completed, efforts are made to reschedule the training at a later date. If training on motor vehicles, towing of trailers, boat training, or ATV/ORUV training is not completed, the employee is not permitted to operate these vehicles in the field until training is completed.

- B. Field training for stream gauging, lampricide application, water chemistry, instrument operation, and other procedures are documented on the Procedural Documentation Form (attachment). Supervisors initial required procedures, employees initial and date completed training, and instructors initial and date after successful completion of training.
- C. Establish training records for each employee.

This procedure has been reviewed and approved by the undersigned representative of Fisheries and Oceans Canada.

REVIEWED/APPROVED


Division Manager (Canada)

DATE 2-12-14

ATTACHMENTS

SEA LAMPREY CONTROL PROGRAM SAFETY & TRAINING DOCUMENTATION

Employee _____ Year _____

TRAINING	Employee Requirement Supervisor (Initial/Date)	Course Completed Employee (Initial/Date)	Course Certification Instructor Or Supervisor (Initial/Date)	Expiry Date Of Certification	Copy of Certificate On File? Front Office (Initial/Date)
CPR					
First Aid					
Respiratory Training (in house)					
Ontario Pesticide Licence					
Michigan Pesticide Licence					
Transport of Dangerous Goods (certification)					
WHMIS (certification)					
WHMIS – annual update (in-house)					
Harassment Training					
Marine Radio Operator's Certificate					
Pleasure Craft Operator (card)					
Animal Care (The Experimental Fish)					
Fish Identification (ROM)					
MED A3 Boat Course					
SVOP					
Small Power Boat Practical < or = 25hp					
Boat Loading and Securing Practical					
Trailer, Trailer Brakes					
Tire Changing					
Daily Vehicle Inspection (in house)					
Driver's Log (in-house)					
Defensive Driving					
Winter Driving Course					
Hoisting/Rigging					
Winch Operation – practical					
Bionic Arm (in-house)					
Back Pack Electrofishing					
Wader Safety (in pool) & Life Jacket Training					
Chain Saw Course					

ATV Rider Course					
Occupational Health and Safety					
Hydraulic tailgate procedures					

SHOP EQUIPMENT PRACTICAL:	Employee Requirement Supervisor (Initial/Date)	Course Completed Employee (Initial/Date)	Adequately Trained Employee (Initial/Date)	Course/Training Certification Instructor Or Supervisor (Initial/Date)	Expiry Date Of Certification	Copy of Certificate On File? Front Office (Initial/Date)
String Trimmer						
Leaf Blower						
Lawn Mower						
Riding Lawn Mower						
Brush Cutter						
Chain Saw						
Kubota						
Snow Plow						
Snow Blower						
Band Saw						
Table Saw						
Radial Arm Saw						
Compound Mitre Saw						
Shaper						
Jointer						
Thickness Planer						
Drill Press						
Pneumatic Nailers and Staplers						
Belt/Disc Sander						
Oscillating Spindle Sander						
Bench Grinder						
Powder Actuated Tools						
Electric Hoist						
GMAW/FCAW Welder						
SMAW/GTAW/HF Welder						
Portable Arc Welder (Gasoline)						
Plasma Cutter						
Oxyacetylene Torches						
Fork Lift						

TASK HAZARD ANALYSES				
Master Identifier	Project Identifier	Task	Employee Requirement Supervisor (Initial/Date)	Review Completed Employee (Initial/Date)
		none		
1.0		Computer Use		
2.0		Filing		
3.0		Mail		
4.0		Photocopier use		
5.0		Public Outreach		
6.0		Telephone Use		
7.0		Two Way Radio		
8.0	AA-001	Biosampling Preserved Parasitic Lamprey		
9.0	AA-002	Servicing Attractant Water Trap - St Mary's R. Tailrace		
10.0	AA-003	Fill Bonar Box with water on pick-ups		
11.0	AA-004	Servicing St. Mary' Portable lamprey traps with Hiab (Bionic arm)		
12.0	AA-005	Servicing Sea Lamprey Trap - Neebing N.		
13.0	AA-006	Servicing Sea Lamprey Trap - Neebing S.		
14.0	AA-007	Servicing Sea Lamprey Trap - Youngs W.		
15.0	AA-008	Servicing Sea Lamprey Trap - Thessalon SW.		
16.0	AA-009	Servicing Sea Lamprey Trap - Graham		
17.0	AA-010	Servicing Sea Lamprey Trap - Thessalon NE		
18.0	AA-011	Servicing Sea Lamprey Trap - Sturgeon		
19.0	AA-012	Servicing Sea Lamprey Trap - Beaver		
20.0	AA-013	Servicing Sea Lamprey Trap - Nottawasaga		
21.0	AA-014	Servicing Sea Lamprey Trap - Saugeen		
22.0	AA-015	Servicing Sea Lamprey Trap - Koshkawong		
23.0	AA-016	Servicing Sea Lamprey Trap - Big Creek		
24.0	AA-017	Servicing Sea Lamprey Trap - Big Carp		
25.0	AA-018	Coated Wire Tag Hand Injector		
26.0	AA-019	Servicing Sea Lamprey Trap - McIntyre		
27.0	AA-020	Servicing Sea Lamprey Trap - Wolf		
28.0	AA-021	Servicing Sea Lamprey Trap - Carp Creek		
29.0	AA-022	Servicing Sea Lamprey Trap - Stokely		
30.0	AA-023	Servicing Sea Lamprey Trap - Little Carp		
31.0	AA-024	Servicing Sea Lamprey Trap - Echo		
32.0	AA-025	Servicing Sea Lamprey Trap - Screen Trap - Bridgland		

TASK HAZARD ANALYSES				
Master Identifier	Project Identifier	Task	Employee Requirement Supervisor (Initial/Date)	Review Completed Employee (Initial/Date)
33.0	AA-026	Servicing Sea Lamprey Trap - Still		
34.0	AA-027	Servicing Sea Lamprey Trap - Salmon		
36.0	AA-028	Servicing Sea Lamprey Trap - Grafton		
37.0	AA-029	Servicing Sea Lamprey Trap - Port Britain		
38.0	AA-030	Servicing Sea Lamprey Trap - Bowmanville		
40.0	AA-031	Servicing Sea Lamprey Trap - Duffins		
42.0	AA-032	Servicing Sea Lamprey Trap - Humber NE		
43.0	AA-033	Servicing Sea Lamprey Trap - Humber SW		
44.0	AA-034	Lamprey Transport		
45.0	AA-035	Nest Surveys - Walking in St. Mary's River Rapids		
46.0	AA-036	Servicing Sea Lamprey Trap / Fishway - Cobourg Cr.		
47.0	AA-037	Manual Tracking with SRX and Small Antenna (boat)		
48.0	AA-038	Manual Tracking with SRX and Small Antenna (land)		
49.0	AA-039	Servicing Sea Lamprey Trap - Shelter Valley		
50.0	AA-040	Microscope Use		
59.0	AA-049	Coated Wire Tag Auto Injector		
61.0		Vehicle Refueling		
62.0		Operating Sandvik (Brush Axe)		
63.0		Lining Boat through Rapids		
64.0		Operating Small Snow Blower		
65.0		Stoplog Installation in stop log barriers		
67.0	AN-001	Regulation and monitoring of TFM (Lampricide)		
68.0	AN-002	Regulation and monitoring of BAYER (Lampricide)		
69.0	AN-003	Conducting Flow Timing Measurements and dilution studies in stream		
70.0	AN-004	Conducting Toxicity Tests in trailer		
71.0	AN-005	Analysis of Water Chemistry Parameters		
72.0	AN-006	Analysis of Ammonia Samples		
73.0	AN-007	Discharge - in stream measuring		
74.0	MA001	Operating Pneumatic Nailers and Staplers		
75.0	MA002	Operating Power Actuated Tools		
76.0	MA003	Operating Band Saw		
77.0	MA004	Operating Drill Press		
78.0	MA005	Operating Radial Arm Saw		

TASK HAZARD ANALYSES				
Master Identifier	Project Identifier	Task	Employee Requirement Supervisor (Initial/Date)	Review Completed Employee (Initial/Date)
79.0	MA006	Operating Table Saw		
80.0	MA007	Operating Shaper		
81.0	MA008	Operating Jointer		
82.0	MA009	Operating Thickness Planer		
83.0	MA010	Operating Belt-Disc Sander		
84.0	MA011	Operating Oscillating Spindle Sander		
85.0	MA012	Operating Compound Mitre Saw		
86.0	MA013	Operating Bench Grinder		
87.0	MA014	Operating Hand Grinder		
88.0	MA015	Operating Cordless Drill		
89.0	MA016	Operating Electric Drill		
90.0	MA017	Operating Electric Hand Tools		
91.0	MA018	Operating Pneumatic Hand Tools		
92.0	MA019	Operating Manual Hand Tools		
93.0	MA020	Ladder use		
94.0	MA021	Operating Chain Saw		
95.0	MA022	Operating Brush Cutter		
96.0	MA023	Operating String lawn Trimmer		
97.0	MA024	Operating Leaf Blower		
98.0	MA025	Operating Pressure Washer		
99.0	MA026	Operating Wet-Dry Vac		
100.0	MA027	Operating Lawn Mower		
101.0	MA028	Operating Riding Lawn Mower		
102.0	MA029	Operating Electric Hoist		
103.0	MA030	Operating Snow Blower		
104.0	MA031	Operating GMAW_FCAW Welder		
105.0	MA032	Operating SMAW_GTAW_HF Welder		
106.0	MA033	Operating Gasoline Welder		
107.0	MA034	Operating Plasma Cutter		
108.0	MA035	Operating Oxyacetylene Torch		
109.0	MA036	Operating Kubota Tractor		
110.0	MA037	Operating Snowplow		
111.0	MA038	Shovelling		

TASK HAZARD ANALYSES				
Master Identifier	Project Identifier	Task	Employee Requirement Supervisor (Initial/Date)	Review Completed Employee (Initial/Date)
112.0	MA039	Painting		
113.0	MA040	Sweeping Shop		
114.0	MA041	Changing Fluorescent Light Ballasts		
115.0	AP001	ATV Maintenance		
116.0	AP002	Bayluscide Wettable Powder Application		
117.0	AP003	Diluting Formaldehyde		
118.0	AP004	Fuel Storage		
119.0	AP005	Hydraulic Tailgate Operation		
120.0	AP006	Outboard Motor Maintenance		
121.0	AP007	Supplementary TFM Sprayer Application		
122.0	AP008	Lampricide Storage		
123.0	AP009	Pump Trailer Maintenance		
124.0	AP010	TFM Drip Feeder Application		
125.0	AP011	TFM Masterflex Application		
126.0	AP012	TFM Pump Feeder Application		
127.0	AP013	General Trailer Maintenance		
128.0	AP014	Loading, Unloading and Transportation of Lampricides and Equipment		
129.0	AP015	Safe Jacking Techniques for Trailer Brake Inspection		
130.0	CT001	Driving		
131.0	CT002	Off Road Driving		
132.0	CT003	Change Tire		
133.0	CT004	Boost Battery		
134.0	CT005	Service Station Fueling		
135.0	CT006	Refuelling Small Engines		
136.0	CT007	Loading Cargo Racks		
137.0	CT008	Hook-up, Tow Trailer		
138.0	CT009	Boat Launching, Loading		
139.0	CT010	Boating		
140.0	CT011	Diluting Formaldehyde		
141.0	CT012	Microscope Use		
142.0	LA001	Advanced Back Pack Electrofisher (ABP-2) Operation		
143.0	LA002	Recharge Batteries		
144.0	LA003	Bayluscide 3.2% Application		

Standard Operating Procedures to Be Reviewed:	Employee Requirement	Procedure Reviewed, Observed, Performed Employee (Initial/Date)	Certification Instructor or Supervisor (Initial/Date)
	Supervisor (Initial/Date)		
AOP:001.x- Quality Assurance			
AOP:006.x- Inventory of Lampricides			
AOP:008.x- Lampricide handling procedures			
AOP:009.x- Procurement of new instruments			
TOP:001.x- Discharge measurement			
TOP:002.x- Dye Studies (Time of travel)			
TOP:003.x- Dye Dilution Studies			
TOP:004.x- Water Chemistry monitors			
TOP:005.x- Measurement of alkalinity			
TOP:006.x- Measurement of pH			
TOP:008.x- Measurement of dissolved oxygen			
TOP:009.x- Measurement of ammonia			
TOP:010.x- Toxicity Testing procedures			
TOP:012.x- Application of Field Grade TFM			
TOP:013.x- Application of Bayluscide 70% Wettable Powder and 20% EC			
TOP:014.x- Application of Field Grade TFM (supplemental)			
TOP:015.x- Application of TFM bars			
TOP:017.x- Application of Bayluscide 3.2 % granular formulation			
TOP:018.x- Procedures for analysis of TFM (spectrophotometric)			
TOP:019.x- Handling of lampricide standards			
TOP:020.x- Millipore filtration of water samples			
TOP:021.x- HPLC analysis for Bayluscide			
TOP:022.x- Automatic water samplers			
IOP:001.x- Discharge measurement devices			
IOP:002.x- ISCO brand water samplers			
IOP:004.x; IOP:004.xA- Turner fluorometers			
IOP:005.x; IOP:005.xA- Peristaltic and Centrifugal pumps			
IOP:006.x- ISCO pH Pal			
IOP:007.x- Beckman pH meter			
IOP:008.x- Accumet 15 pH meter			

