Updated February 7, 2022

Monitoring Checklist for
S-211 Portable Pumps and Water Use (2012)

To ensure that sufficient wildland fire training opportunities are available for private sector contractors who participate in the Pacific Northwest crew and engine/tender contracts, and that this training meets or exceeds National Wildfire Coordination Group (NWCG) standards, the Pacific Northwest Wildfire Coordination Group (PNWCG) has entered into memorandums of understanding (MOUs) with representatives of two groups of training providers. The groups are firefighting contractor associations (FCA) and public training providers (PTP).

The United States Forest Service (USFS) MOU Representative and staff administer the FCA MOUs for PNWCG and monitor FCA courses and instructors.

The Interagency Zone Training Committee (IZTC) representatives perform PTP MOUs administration for PNWCG and monitor PTP courses and instructors in their respective geographic zones of responsibility. The IZTC may also be asked to have representatives monitor FCA courses by the MOU-Rep when needed.

This checklist outlines the key facilities, course concepts and teaching elements that course monitors should be observing and documenting.

Course monitors will introduce themselves to the lead instructor and explain that they are evaluating the course per the Memorandum of Understanding (MOU). Course monitoring checklists (see APPENDIX A) for each NWCG course being monitored will be provided to the IZTC member agency representative monitors in advance of assignments. The checklists will serve as both a form for evaluating the course instruction and a report to be sent to the IZTC. Course checklists may be completed through course monitoring and by examination of the written agenda, lesson plan, test(s), student evaluations or other documents presented by the instructor. Upon completion of the course monitoring/evaluation, monitor will scan and email the completed monitoring documentation to the R-6 Fire Contract Operations inbox SM.FS.fact@usda.gov (within 2-3 working days of monitoring course delivery). The R-6 Fire Contract Operations Specialist will then forward monitoring documentation to the (FCA) or (PTP) the training provider is affiliated with; within ten (10) working days of training delivery.

Redmond Air Center
Contract Operations Specialist
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NOTE: Serious deficiencies include omitting required course modules, substitution of training material that results in dropping portions of required course material, course instruction time varying greatly from recommendations listed in the NWCG Standards for Course Delivery, PMS 901-1 (PMS 901-1), required oral and written testing not done or done with open book, or other deficiencies that limit the ability of students to learn the course objectives.

Monitoring Checklist for
S-211 Fire Operations in the Wildland/Urban Interface

Name of Monitor_____Phone:_____

Address_____Unit/Agency_____

Course Location_____Date:_____

Lead Instructor_____Phone:_____

Address_____ Certifying Association_____

Unit Instructor_____Phone:_____

Address_____ Certifying Association_____

Unit Instructor _____Phone:_____

Address_____ Certifying Association_____

Interpreter_____Phone:_____

Address_____ Certifying Association_____

S-211 Course Administration

Language Requirements		
	Y	**N**
Non-English Speaking Students Present?		
Instructor able to Converse Fluently in Language of Non-English Speaking Students?		
If Instructor was Non-Fluent in Specific Language, was a Fluent Translator Present?		
Translator's Name:		
Comments/Suggestions:		

Course Materials		
	Y	**N**
Were the March 2012 course materials listed below used?		
• NFES 3026 S-211 Instructor Guide		
• NFES 3028 S-211 Student Workbook, one per student		
• NFES 3027 CD-ROM Course Materials		
Also needed 1 copy each student:		
• NFES 000897 Fire Stream/Friction Loss Calculator		
• NFES 000871 High Pressure Portable Pump Instructions, PMS 460 (4/10)		
• NFES 1077 Incident Response Pocket Guide		
Language Specific Course Materials Provided for Non-English Speaking Students?		
Comments/Suggestions:		

Audiovisuals		
	Y	**N**
Were any audiovisual aids used to instruct including:		
Computer, projector, and screen.		
White board with markers and eraser.		
Easel with extra flip chart pads and markers.		
Comments/Suggestions:		

Teaching Facility		
	Y	**N**
Did the Teaching Facility Provide for Adequate?		
Space?		
Lighting?		
Seating?		
Ventilation?		
Comments/Suggestions:		

Course Administration		
	Y	**N**
Was Daily Attendance Documented with the use of Sign in Sheets?		
Was a Course Agenda Provided?		
Did each student receive copies of the 5 handouts in Appendix C?		
Were the (4) classroom exercises administered? Units 1,3,4		
Was the field exercise (1) administered? Unit 5		
Did each student complete a course evaluation form Appendix E?		
Was the classroom final exam administered?		
Was the field final exam administered?		
Comments/Suggestions:		

Unit 0 – Introduction		
Course Introduction (15 minutes) Start Time: _____ End Time: _____		
Unit Objectives:	**Y**	**N**
Did the instructor cover the following objectives?		
Introduce instructors and students.		
Discuss course logistics		
Present course overview		
Comments/Suggestions:		

Unit 1 – Portable Water Delivery Systems		
(15-30 minutes) Start Time: _____ End Time: _____		
Unit Objectives:	**Y**	**N**
Define the ultimate goal of a water delivery system.		
List two reasons why portable water delivery systems are important for wildland firefighting and prescribed burning.		
Identify key factors to consider when designing, setting up, and operating a portable water delivery system.		
Did instructor facilitate an oral review session at the end of the unit?		
Comments/Suggestions:		

Unit 2 – Equipment		
(1-2 hours) Start Time: _____ End Time: _____		
Unit Objectives:	**Y**	**N**
Distinguish the differences between the two cycle and four cycle engines and identify which one of these differences is most important to a pump operator.		
Label the parts of a commonly used portable pump.		
Identify the purpose of a suction hose and a discharge hose.		
Match types of wildland fire appliances and tools with their respective purpose.		
Identify nozzle types.		
List one type of national portable pump kit.		
Comments/Suggestions:		

Unit 3 – Responsibilities		
(2-3 Hours) Start Time: _____ End Time: _____		
Unit Objectives:	**Y**	**N**
Given scenarios and photos, identify risk management, fuel handling, and environmental concerns.		
Identify methods to prevent cavitation and water hammer.		
List the four components that should be included in the design of a portable water delivery system.		
Given photos; critique a portable pump setup.		
Identify how to prevent the engine from flooding when starting the pump.		
Identify how to troubleshoot common problems with portable pumps.		
Identify how to select nozzles and apply water to achieve tactical objectives.		
List general guidelines for maintaining and retrieving hoses.		
Comments/Suggestions:		

Unit 4 – System Design and Hydraulics		
(3-4 hours) Start Time: _____ End Time: _____		
Unit Objectives:	**Y**	**N**
List one reason it is important for a pump and nozzle operator to have a basic understanding of hydraulics.		
Given scenarios, determine flow and pump discharge pressure, and select appropriate pump(s).		
Given scenarios, draw a schematic of the design of a water delivery system, and troubleshoot the delivery system.		
Given scenarios, determine whether parallel hose lay, series pumping, or parallel pumping would be the best option.		
Comments/Suggestions:		

Unit 5 – Field Exercise		
(4-8 hours field) Start Time: _____ End Time: _____		
Unit Objectives?	**Y**	**N**
Students participate in portable water delivery system set up, operation, troubleshooting, and shut down.		
Students demonstrate appropriate risk management activities, such as wearing PPE (including eye and ear protection as appropriate) and safe fuel handling procedures.		
Comments/Suggestions:		

Total Hours of Instructor Led Training = 16-24 Hours		
Recommendations:		
Signature of Monitor	**Printed Name & Title**	**Date**