

SAFETY AND HEALTH INVESTMENT PROJECTS FINAL REPORT

Trench and Excavation Safety for Wastewater Construction Workers
and Plumbing Contractors
2016ZA00329
6-30-2016 to 8-31-2017

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Washington Onsite Sewage Association

8/31/2017

Written By: John Thomas / Chuck Ahrens



Funding and support for this project has been provided by the State of Washington, Department of Labor & Industries, Safety & Health Investment Projects.

[Washington Onsite Sewage Association] is solely responsible for the content of and views expressed in this report and related materials unless they have been formally endorsed by the Washington State Department of Labor and Industries.

PART I

Narrative Report

Abstract:

Present a short overview of the nature and scope of the project and major findings (less than half a page).

Excavation and Trench exposures in the On-site Sewage industry have been poorly addressed for many years by many of the small businesses certified in our industry to do the work. Fatality and accident reporting has been further complicated by inconsistent characterization of accident profiles to industry category in state and federal agency reporting databases. Challenges also include changes in worker demographics that include training of workers with English as a second language. Prior to the completion of this project, availability of industry specific training programs for typical OSS work scenarios that workers could relate to the applicable code under the Part N requirements in Washington has not existed.

Industry interviews of on-site system service providers have found little to no programmatic approaches to address compliance to the excavation and trenching rule and requirements in Washington. Field practice observations in the development of this project supported these findings. Further, because of the limited resources of small business practitioners, development of written programs, and implementation of appropriate workplace training and mitigation is limited or non existent. As a result, exposure is high and no central resource or education exists. The need for an industry specific resource to address awareness, education and workplace resource tools is apparent and highlighted by fatalities of Washington workers in recent years. The need to address identification of exposures, awareness of WAC 296-155 Part N 650-66411 requirements and mitigation through, safety management planning and worker training of work procedures to manage or mitigate risk, is funded under this LNI SHIP Grant.

Purpose of Project:

Describe what the project was intended to accomplish.

The primary purpose of the project has been to develop and deliver an Excavation and Trench Safety training program that is specific for the on-site industry and a Spanish translation companion document handout. The creation and delivery of 4 training events and education materials for small business to develop internal excavation and trenching programs that are compliant with all elements of the WAC 296-155 Part N 650-66411 requirements is one of the stated deliverables. This resource will allow industry service providers access to an industry specific Excavation and Trench Safety program framework that will be used to develop compliant and company specific Safety programs that address the administrative and record keeping requirements of the rules under the WAC 296-155 Part N 650-66411.

Statement and Evidence of the Results:

Provide a clear statement of the results of the project include major findings and outcomes and provide evidence of how well the results met or fulfilled the intended objectives of the project.

All objectives of the project have been met or exceeded and delivered within the approved budget and scope of the grant.

During the first phase of the project, key activities that were accomplished included identification of known and potential work hazards including an assessment of workplace and field activities associated with excavations and trenching. This provided base information for the development of the training resource that came later in the project. Additionally, field observations by the grantee of work practices during construction activities allowed verification of common practice of typical work tasks.

A total of 4 companies participated in this element of the study. Service providers with excavation exposures included companies with industry certifications for Installation, Pumping, Operations and Maintenance and OSS Inspection. During the field study phase, 6 individual work projects involving excavations and/or trenching were observed and reviewed.

Interpreting the results of the field study and observations, a review of existing practices in participating companies, the next phase of the project used a gap analysis approach to define current industry approaches to compliance of the WAC 296 155 Part N 650-66411 rule and requirements and development of the training resource.

The principle conclusions that were determined upon review of the analysis were that companies either had no awareness of the Part N requirements, or were aware of the requirements and had implemented some but not all elements of the rule.

This process, provided key information to development of the education and training resource, that was submitted and reviewed by the technical support liason from the SHIP program. Supporting program documents and handouts for the upcoming classes were also developed in an editable format for future participants to use as a template for company specific excavation and trenching programs along with a Spanish translation of the handouts.

Four classes were presented during the final two quarters of the grant period in addition to open discussion training forums in conjunction with other training. Two of the classes were presented to individual companies with larger workforces and geared toward their specific excavation and trench safety programs. The other two classes were open enrollment and allowed for smaller companies to participate and interact with like sized companies doing similar work. This approach allowed us to refine the training approach and presentation of critical learning objectives in different learning environments. Course evaluations were completed by participants at the end of each session and course improvements and messaging were incorporated into the final version.

Measures to Judge Success:

If relevant, state what measures or procedures were taken to judge whether/ how well the objectives were met and whether the project or some other qualified outside specialist conducted an evaluation.

Current rule review

A comprehensive review of Chapter 296-155 WAC Part N 650-66411 and associated applications to materials handling and excavations in context to the specific applications in the on-site industry confirmed the lack of understanding of the requirements by industry.

Field Observations

Field observations and interviews of field staff revealed the challenges of implementation of the applicable rule. This provided focus for the content and structure of the education and training resource that was developed.

Education Resource development and delivery**LNI Staff support**

Throughout the project we met or teleconferenced with LNI SHIP grant staff to review progress of milestone deliverables. The LNI Technical Specialist for the grant reviewed the educational resources during development and offered comments that were incorporated into final documents and interpretation. Guidance on rule application in several specific applications and work procedures common to the industry (specifically conflict in DOH recommended profile for Soil Test Pits and Part N requirements). His insight and expertise on the subject matter to answer questions and provide feedback were invaluable to the success of the project.

Future impact:

Follow up field observations and informal interviews by WOSSA with participating business owners and workers in the project were conducted. Feedback from training evaluations and post class discussions supported our view of the effectiveness of the training and a raised level of awareness of workers in trench and excavation. The training resources developed under this LNI SHIP Grant program have been discussed with the Washington Onsite Sewage Association Board of directors and will be incorporated as a permanent part of the annual training schedule starting in the fall of 2017. Post course evaluations will continue to be used to gauge effectiveness of the training and remain in place to support the sustainability of the training if subsequent rule changes under the Part N requirements are implemented.

Relevant Processes and Lessons Learned:

Having a working knowledge of field practice and complete understanding of the target audience is critical to building a quality product (in this case education/training). In this project, a regulatory requirement and expert knowledge or access to it, framed the core foundation of the program elements in the training resources. Development of effective training methods provide insight to actual field practice allows appropriate understanding of content needs and an appropriate method of “transfer of knowledge” to the topic. Creating and using evaluation tools that leverage the project deliverables should be structured so that as they are used, they leverage subsequent phases of project deliverables.

Lessons Learned

Positives:

Having a positive working relationship with industry service providers and their willingness to identify and solve problems has been foundational to our ability to develop and deliver training solutions that are effective and specific to the need.

Understanding the limitations of small business capacity to develop internal programs helped us stay focused on developing useful training that are specific and simple to understand. Having a high level of organizational and project planning experience to create education resources development and thousands of hours in training experience greatly facilitated the development and transition of the education deliverable.

Negatives:

An industry lack of understanding to the application of the Part N standard will be overcome in time as additional training and clarification on rule emerges. It will be important that LNI compliance officers have a clear understanding of the application of Part N requirements application to the onsite industry.

Further, it was observed in other industry training by supplier representatives that unsafe work practices were incorporated into the training that supports what WOSSA observed. One manufacturer’s tank installation certification training that WOSSA observed, included images of entry into an excavation with no provision for protection to “level” out the bottom of the excavation. A common practice in our industry that is promulgated by other training resources developed without any regard to safety requirements. WOSSA has begun an internal campaign to raise awareness to these issues with all of the sellers of OSS components that provide industry training.

Rule making by DOH presented another significant barrier with their published profile recommendations on soil test pit configurations that were not Part N compliant. Their recommendations show a low level of understanding the implications of rule when giving guidance. It enhances risk, because it is perceived that DOH rule has been vetted and agreed by LNI when it was not. It is an important need to understand for future program developers under the SHIP program, and consideration should be given to its incorporation to future grant opportunities.

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Product Dissemination:

Outline of how the products of the project have been shared or made transferrable.

All of the training resources including the powerpoint presentation are created in currently available software in Microsoft Office and were printed and distributed at the various classes that were offered as part of the grant. Editable electronic copies are available to the industry upon request and will eventually be uploaded to the LNI website as another point of access. All of the handouts were designed to be used by industry, and are scoped for use by any industry organization regardless of size or number of employees. We will continue to offer this program going forward and any industry company or employees may either attend a regularly scheduled class or do an in-house training.

Feedback:

Provide feedback from participants, trainees, individuals who have used your products/processes, as well as any reports from an independent evaluator on the project.

Each class participant was provided with an opportunity to provide feedback on course content, presentation method, presenter, applicability to them individually in their present position and open comment feedback on the program overall (completed course evaluation forms are available for LNI review). Post course interviews were held with business owners to reinforce the Part N requirements and answer questions on interpretation of rule to various job tasks.

Project's Promotion of Prevention:

Explain how the results or outcomes of this project promote the prevention of workplace injuries, illnesses, and fatalities?

Awareness to excavation and trenching hazards unique to the on-site industry is increased significantly by participation in the class. Working through a typical field case studies in an interactive discussion allows participants to immediately apply a better understanding of workplace activities through the rule review in the classroom setting using the combination of case studies to rule application. Our expectation is that companies participating in this program will be enabled to create their own company specific excavation and trenching programs or will be able to use the resources to enhance existing programs already in place.

Uses:

How might the products of your project be used within the target industry at the end of your project?

Is there potential for the product of the project to be used in other industries or with different target audiences?

With an estimated industry turnover of at least 25-30% annually and new company start-ups in a robust economy, the benefit from this training need supports it as a permanent offering in the WOSSA curriculum in the future. This training resource will be an effective training tool indefinitely and will be kept current to rule or work environment changes through our internal course review process. Further, we explore arrangements to have it be available to the National Onsite Wastewater Association for distribution nationwide to their affiliate (state) organizations. There is significant potential for use of this training resource with minor modifications of the training resource, to any employer needing Part N training and registration will be open to all.

Organization Profile:

For awarded organizations, to include partners and collaborators, provide a brief description of each organization. Mission, vision, and purpose for each of the organizations who applied (this includes partners and collaborators) for the grant.

The Washington Onsite Sewage Association is a non-profit industry organization with a primary focus on education of industry practitioners established in 1990. This includes Designers, Regulators, Installers, Operations and Maintenance, System Inspectors and Pumpers that find work in this industry. With over 400 member companies, it represents a significant portion of the working industry and since the start of the Association Training center in 1996, WOSSA has been the primary source of education resources for service providers in the industry and is recognized by the State DOH, DOL and Local Health Jurisdictions in this role.

Additional Information

Project Type <input type="checkbox"/> Best Practice <input type="checkbox"/> Technical Innovation <input checked="" type="checkbox"/> Training and Education Development <input type="checkbox"/> Event <input type="checkbox"/> Intervention <input type="checkbox"/> Research <input type="checkbox"/> Return to Work <input type="checkbox"/> Other (Explain):	Industry Classification (check industry(s) this project reached directly) <input type="checkbox"/> 11 Agriculture, Forestry, Fishing and Hunting <input type="checkbox"/> 21 Mining <input checked="" type="checkbox"/> 22 Utilities <input checked="" type="checkbox"/> 23 Construction <input type="checkbox"/> 31-33 Manufacturing <input type="checkbox"/> 42 Wholesale Trade <input type="checkbox"/> 44-45 Retail Trade <input type="checkbox"/> 48-49 Transportation and Warehousing <input type="checkbox"/> 51 Information <input type="checkbox"/> 52 Finance and Insurance <input type="checkbox"/> 53 Real Estate and Rental and Leasing <input type="checkbox"/> 54 Professional, Scientific, and Technical Services <input type="checkbox"/> 55 Management of Companies and Enterprises <input type="checkbox"/> 56 Administrative and Support and Waste Management and Remediation Services <input type="checkbox"/> 61 Educational Services <input type="checkbox"/> 62 Health Care and Social Assistance <input type="checkbox"/> 71 Arts, Entertainment, and Recreation <input type="checkbox"/> 72 Accommodation and Food Services <input type="checkbox"/> 81 Other Services (except Public Administration) <input type="checkbox"/> 92 Public Administration
Target Audience: Small Business OSS Construction Industry and Gov't.: LHJ Regulatory, Designers, Installation/Construction, Operations and Maintenance/Inspectors for Decentralized Wastewater Systems	
Languages: English w/Spanish translation for class handouts	
Please provide the following information - - <i>(information may not apply to all projects)</i>	
# classes/events:	4/8
# hours trained	328/131
# students under 18	N/A
# workers	41/131
# companies represented	17/52
# reached (if awareness activities)	+100
Total reached	172
List, by number above, industries that project products could potentially be applied to. 22,23	
Potential impact (in number of persons or companies) after life of project? 10,000	
Have there been requests for project products from external sources? Yes <i>If Yes, please indicate sources of requests:</i> Interest is expressed from sister organizations that provide training in this industry nation wide. Minnesota Onsite Association, Texas Onsite Association, Colorado Onsite Association, Nebraska Onsite Association, Oregon Onsite Association, Ohio Onsite Association, Michigan Onsite Association, Florida Onsite Association, Missouri Onsite Association	

PART II

Financial Information Budget Summary

Project Title:	Trench and Excavation Safety for Wastewater Workers and Plumbing Contractors		
Project #:	2016ZA00329	Report Date:	08.31.17
Contact Person:	Chuck Ahrens	Contact #:	253.770.6594
Start Date:	06.30.16	Completion Date:	08.31.17

1.	Total original budget for the project	\$ <u>183,711</u>
2.	Total original SHIP Grant Award	\$ <u>146,115</u>
3.	Total of SHIP Funds Used	\$ <u>143,469.62</u>
4.	Budget Modifications (= or - if applicable)	\$ =
5.	Total In-kind contributions	\$ 39,546
6.	Total Expenditures (lines 3+4+5)	\$ <u>183,015.62</u>

Instructions:

- Complete the Supplemental Schedule (Budget) form first (on the next page).
- The final report must include all expenditures from date of completion of interim report through termination date of grant.
- Indicate period covered by report by specifying the inclusive dates.
- Report and itemize all expenditures during specified reporting period per the attached supplemental schedule.
- Forms must be signed by authorized person (see last page).
- Forward one copy of the report to **Grant Manager Name, SHIP Grant Manager at PO Box 44612, Olympia, WA 98504-4612**

PART II *(Continued)*

Financial Information

Supplemental Schedules (Budget)

Project Title:	Trench and Excavation Safety of Wastewater Workers and Plumbing Contractors		
Project #:	2016ZA00329	Report Date:	08.31.17
Contact Person:	Chuck Ahrens	Contact #:	253.770.6594
Total Awarded:	\$146,115.00		

ITEMIZED BUDGET: How were SHIP award funds used to achieve the purpose of your project?

	Budgeted for Project	Amount Paid Out	Difference
A. PERSONNEL	\$114,840.00	\$114,840.00	\$0.00

Explanation for Difference and other relevant information:

As additional potential safety hazards associated with OSS workers' exposure to Trenching and Excavation were identified, the training materials needed to be further edited with new and updated information prior to the final report.

In Milestone 4 we submitted a modification request of Travel and Other budgets in order to transfer funds to the Personnel budget. The amount adjusted in the Personnel budget was used to cover the costs associated with the further editing of the training materials.

The amount of the approved Modification Request for the Personnel Budget is included in the amount "Budgeted for Project" in this final report.

	Budgeted for Project	Amount Paid Out	Difference
B. SUBCONTRACTOR	\$0.00	\$0.00	\$0.00

Explanation for Difference and other relevant information:

	Budgeted for Project	Amount Paid Out	Difference
C. TRAVEL	\$1,585.00	\$1,025.48	\$559.52

Explanation for Difference and other relevant information:

In Milestone 4 we submitted a modification request of Travel and Other budgets in order to transfer funds to the Personnel budget. The amount adjusted in the Personnel budget was used to cover the costs associated with the further editing of the training materials.

The amount of the approved Modification Request for the Travel Budget is included in the amount "Budgeted for Project" in this final report.

	Budgeted for Project	Amount Paid Out	Difference
D. SUPPLIES	\$4,200.00	\$2,114.00	\$2,085.86
Explanation for Difference and other relevant information: Original Supplies budget was estimated per month. The rate of Office Supply use for each of the Milestones was less than estimated.			

	Budgeted for Project	Amount Paid Out	Difference
E. PUBLICATIONS	\$18,990.00	\$18,990.00	\$0.00
Explanation for Difference and other relevant information:			

	Budgeted for Project	Amount Paid Out	Difference
F. OTHER	\$6,500.00	\$6,500.00	\$0.00
Explanation for Difference and other relevant information:			
In Milestone 4 we submitted a modification request of Travel and Other budgets in order to transfer funds to the Personnel budget. The amount adjusted in the Personnel budget was used to cover the costs associated with the further editing of the training materials			
The amount of the approved Modification Request for the Other Budget is included in the amount "Budgeted for Project" in this final report.			

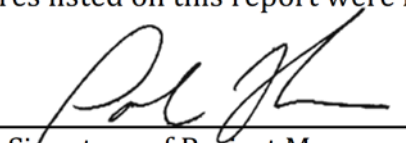
	Budgeted for Project	Amount Paid Out	Difference
TOTAL DIRECT COSTS	\$146,115.00	\$143,469.62	\$2,645.38
	Budgeted for Project	Amount Paid Out	Difference
TOTAL INDIRECT COSTS	\$0.00	\$0.00	\$0.00
	Budgeted for Project	Amount Paid Out	Difference
TOTAL SHIP BUDGET	\$146,115.00	\$143,469.62	\$2,645.38

	Budgeted for Project	Amount Paid Out	Difference
G. IN-KIND	\$37,596.00	\$39,546.00	-\$1,950.00
Explanation for Difference and other relevant information:			
Upon starting this project we underestimated the level of participation we would receive from the WOSSA Board, WOSSA Members and Industry Professionals. This added review and guidance regarding trenching and excavation hazard exposures and training materials was encouraged by WOSSA and its staff. The input from these individuals helped to provide an end product that has been accepted very well within the on-site industry within the State of Washington.			

I hereby certify that the expenditures listed on this report were made with my approval:

08.31.17

Date


Signature of Project Manager

PART III

Attachments:

Provide resources such as written material, training packages, or video/ audio tapes, curriculum information, etc. produced under the grant.

Also include copies of publications, news releases, curriculum, posters, brochures, etc.

The above information should also be provided on a CD or DVD for inclusion in the file.

- DVD: must be in an MP4 format
Other video files must be provided in uncompressed source files.
- Publications:
PDF of publication should be provided. SHIP also needs the original publishing documents (design documents), .eps, and .psd (if any illustrations/graphics are used)

ATTACHMENTS Included in Final Report:

- **Financial Information**
- **Included in Final Report:** Sample of Training Class Feedback

ATTACHMENTS:

- **PowerPoint Presentation**
- **PowerPoint Presentation – Spanish Translation**
- **Training Video's – 1 Total**
- **Trainer Handbook**
- **Presentation Handout**
- **Presentation Handout – Spanish Translation**
- **Training Handbook – WAC 296-155 Part N**

REMINDER!!!: All products produced, whether by the grantee or a subcontractor to the grantee, as a result of a SHIP grant are in the public domain and can not be copyrighted, patented, claimed as trade secrets, or otherwise restricted in any way.



WOSSA

PO Box 9279

Tacoma, WA 98490-0279

Invoice

Date	Invoice #
7/31/17	2015-5904

Bill To
WA State LNI Safety & Health Investment Proj. Jenifer Jellison PO Box 44612 Olympia, WA. 98504-4612

Ship To
WA State LNI Safety & Health Investment Proj. Jenifer Jellison PO Box 44612 Olympia, WA 98504-4612

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
			7/31/17			
Quantity	Item Code	Description			Price Each	Amount
86.5	LNI SHIP - JT Sal...	Project Manager Salary			50.48	4,366.52
86.5	LNI SHIP - JT Fri...	Project Manager Fringe			8.58	742.17
92	LNI SHIP - CA Sa...	Project Specialist Salary			24.03	2,210.76
92	LNI SHIP - CA Fr...	Project Specialist Fringe			4.08	375.36
19.5	LNI SHIP - AD S...	Andrea Dodson Salary			15.00	292.50
19.5	LNI SHIP - AD Fr...	Andrea Dodson Fringe			2.55	49.73
1	LNI SHIP - Travel	Travel Expense			0.00	0.00
1	LNI SHIP - Suppli...	Supplies Expense			354.24	354.24
1	LNI SHIP - Public...	Publications Expense			0.00	0.00
1	LNI SHIP - Other	Other Expense - Training Expenses			0.00	0.00
1	LNI SHIP - JT Sal...	Hours Donated In-Kind Beyond Allowable Grant			-2,054.51	-2,054.51
		Personnel Budget				
		sales tax			7.80%	0.00
Total					\$6,336.77	

Phone #	Fax #	E-mail	Web Site
253 297-2837	253-770-0896	administrator@wossa.org	www.wossa.org



Washington On-Site Sewage Association
PO Box 9279
Tacoma, WA. 98490

Grant Expense Statement

Month Expenses Occured: July

Project	Date	Expense Description	Accom	Mileage	Meals	Supplies	Facility	Instructor	Other	Total
LNI SHIP Grant										
	05.19.17	Office Depot				52.71				0.00
	05.30.17	Office Depot				171.53				52.71
										171.53
										0.00
										0.00
										0.00
	07.31.17	Printing - 2000 Sheets @.065				130.00				130.00
										0.00
										0.00
TOTAL										354.24
Total Monthly Expenses per Category			0.00	0.00	0.00	354.24	0.00	0.00	0.00	354.24



Washington On-Site Sewage Association

PO Box 9279

Tacoma, WA. 98490

Grant Budget Summary

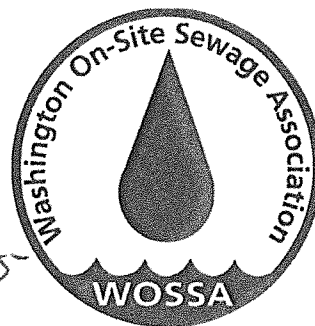
WOSSA Staff:

- John Thomas - Project Manager**
- Chuck Ahrens - Project Specialist**
- Andrea Dodson - Admin. Assistant**

Milestone of Summary: **Final Report**

Project	Expense	Staff	Total Project Budget	Amount Billed (July)	Amount Billed (Aug)	Amount Billed (Sept)	Amount Billed (Oct)	Amount Billed (Nov)	Amount Billed (Dec)	Amount Billed (Jan)	Amount Billed (Feb)	Amount Billed (Mar)	Amount Billed (Apr)	Amount Billed (May)	Amount Billed (June)	Amount Billed (July)	Budget Remaining	Total Billed Year to Date	Project Balance	
Total Grant Awarded																			\$146,115.00	
A. Personnel																			Total Personnel Budget	\$114,840.00
	Project Manger	Salary	\$62,724.00	\$2,145.40	\$2,221.12	\$6,310.00	\$3,558.84	\$4,088.88	\$4,972.28	\$4,947.04	\$5,224.68	\$5,578.04	\$4,896.56	\$4,921.80	\$5,300.40	\$4,366.52				
		+ Fringe @ 17%	\$10,836.00	\$364.65	\$377.52	\$1,072.50	\$604.89	\$694.98	\$845.13	\$840.84	\$888.03	\$948.09	\$832.26	\$836.55	\$900.90	\$742.17				
		Total PM. Expense	\$73,560.00	\$2,510.05	\$2,598.64	\$7,382.50	\$4,163.73	\$4,783.86	\$5,817.41	\$5,787.88	\$6,112.71	\$6,526.13	\$5,728.82	\$5,758.35	\$6,201.30	\$5,108.69	\$5,079.93	\$68,480.07		
	Project Specialist	Salary	\$27,492.00	\$1,045.31	\$2,066.58	\$2,859.57	\$1,814.27	\$2,234.79	\$2,306.88	\$3,508.38	\$3,075.84	\$2,823.53	\$2,967.71	\$3,027.78	\$3,171.96	\$873.84				
		+ Fringe @ 17%	\$4,668.00	\$177.48	\$350.88	\$485.52	\$308.04	\$379.44	\$391.68	\$595.68	\$522.24	\$479.40	\$503.88	\$514.08	\$538.56	\$0.00				
		Total PM. Expense	\$32,160.00	\$1,222.79	\$2,417.46	\$3,345.09	\$2,122.31	\$2,614.23	\$2,698.56	\$4,104.06	\$3,598.08	\$3,302.93	\$3,471.59	\$3,541.86	\$3,710.52	\$873.84	-\$4,863.32	\$37,023.32		
	Admin. Assistant	Salary	\$7,800.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,245.00	\$975.00	\$1,087.50	\$1,005.00	\$1,095.00	\$915.00	\$885.00	\$772.50	\$0.00				
		+ Fringe @ 17%	\$1,320.00	\$0.00	\$0.00	\$0.00	\$0.00	\$211.65	\$165.75	\$184.88	\$170.85	\$186.15	\$155.55	\$150.45	\$131.33	\$0.00				
		Total PS. Expense	\$9,120.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,456.65	\$1,140.75	\$1,272.38	\$1,175.85	\$1,281.15	\$1,070.55	\$1,035.45	\$903.83	\$0.00	-\$216.61	\$9,336.61	
Total Personnel Budget Billed to Date																			\$114,840.00	
Total Personnel Budget Remaining																			\$0.00	
B. Subcontractor																			N/A	
C. Travel																			Total Travel Budget	\$1,585.00
	POV Mileage	Travel Allowance	\$1,085.00	\$0.00	\$0.00	\$96.05	\$22.60	\$0.00	\$0.00	\$0.00	\$33.90	\$137.16	\$185.05	\$0.00	\$550.72	\$0.00	\$59.52	\$1,025.48		
	Per Diem	Meals	\$500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$500.00	\$0.00		
Total Travel Budget Billed to Date																			\$1,025.48	
Total Travel Budget Remaining																			\$559.52	
D. Supplies																			Total Supplies Budget	\$4,200.00
	Office Supplies	Office Supplies	\$4,200.00	\$0.00	\$0.00	\$195.00	\$162.01	\$97.50	\$160.93	\$97.50	\$97.50	\$598.19	\$97.50	\$156.27	\$97.50	\$354.24	\$2,085.86	\$2,114.14		
Total Supplies Budget Billed to Date																			\$2,114.14	
Total Supplies Budget Remaining																			\$2,085.86	
E. Publications																			Total Publications Budget	\$18,990.00
		Pipeline Articles	\$3,240.00	\$0.00	\$810.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$6,060.00	\$0.00	\$10,500.00	\$1,620.00	\$0.00	-\$15,750.00	\$18,990.00		
		Training Manuals	\$15,750.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$15,750.00	\$0.00		
Total Publications Budget Billed to Date																			\$18,990.00	
Total Publications Budget Remaining																			\$0.00	
F. Other																			Total Other Budget	\$6,500.00
	Other	In-Class Training Expenses	\$1,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,000.00	\$3,500.00	\$1,000.00	\$0.00	-\$5,500.00	\$6,500.00		
		Spanish Translation	\$5,500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,500.00	\$0.00		
Total Other Budget Billed to Date																			\$6,500.00	
Total Other Budget Remaining																			\$0.00	
July Billings																			\$3,732.84	
August Billings																			\$5,826.10	
September Billings																			\$11,018.64	
October Billings																			\$6,470.65	
November Billings																			\$8,952.24	
December Billings																			\$9,817.65	
January Billings																			\$11,261.82	
February Billings																			\$11,018.04	
March Billings																			\$17,905.56	
April Billings																			\$12,553.51	
May Billings																			\$24,491.93	
June Billings																			\$14,083.87	
July Billings																			\$6,336.77	
Total Project Expenses																			\$143,469.62	
Total Project Budget Remaining																			\$2,645.38	

WOSSA Trenching and Excavation for OSS – 04.25.17



Name of Attendee: Isaac Frausto

Company: WINDSOCK Farms

Address: 440 SUNSET Ave Eastsound, WA 98245

Tel: 360-317-5715

Location of Training: Orcas Island, WA.
(Circle the appropriate number)

Instructor(s): John Thomas

Trenching & Excavation for OSS: Content	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.) The objectives were clearly stated.	(5)	4	3	2	1
2.) The material learned was what I needed.	(5)	4	3	2	1
3.) The training helped me understand important hazards I may encounter in my job.	(5)	4	3	2	1
4.) Based on what I learned, I will make changes to improve my personal safety for Trenching and Excavation in my job.	(5)	4	3	2	1
5.) The content was clear and easy to understand.	(5)	4	3	2	1
STRUCTURE					
6.) The presentation methods were effective.	(5)	4	3	2	1
7.) The visual aids, handouts or notes were Effective.	(5)	4	3	2	1
8.) The length of training and each session was About right.	(5)	4	3	2	1
9.) The training encourages participation.	(5)	4	3	2	1
10.) I will recommend the training to others	(5)	4	3	2	1

Overall Evaluation	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(If made available, otherwise no ranking here)					
OVERALL EVALUATION					
The training met my need.	(5)	4	3	2	1
I learned what I needed	(5)	4	3	2	1
I will recommend the training to others	(5)	4	3	2	1

COMMENTS

Please comment on any other aspects of the training

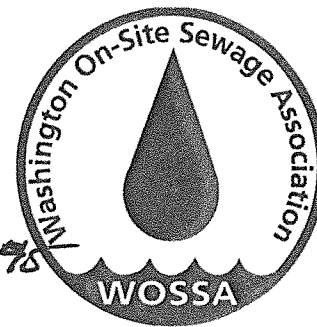
WOSSA Trenching and Excavation for OSS – 04.25.17

Name of Attendee: Mark O'Neill

Company: Orcas Sewage Design

Address: 138 Sarafog, Westsound, Wa. 98298

Tel: (360) 876-2762



Location of Training: Orcas Island, WA.

Instructor(s): John Thomas

(Circle the appropriate number)

Trenching & Excavation for OSS: Content	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.) The objectives were clearly stated.	5	4	3	2	1
2.) The material learned was what I needed.	5	4	3	2	1
3.) The training helped me understand important hazards I may encounter in my job.	5	4	3	2	1
4.) Based on what I learned, I will make changes to improve my personal safety for Trenching and Excavation in my job.	5	4	3	2	1
5.) The content was clear and easy to understand.	5	4	3	2	1
STRUCTURE					
6.) The presentation methods were effective.	5	4	3	2	1
7.) The visual aids, handouts or notes were Effective.	5	4	3	2	1
8.) The length of training and each session was About right.	5	4	3	2	1
9.) The training encourages participation.	5	4	3	2	1
10.) I will recommend the training to others	5	4	3	2	1

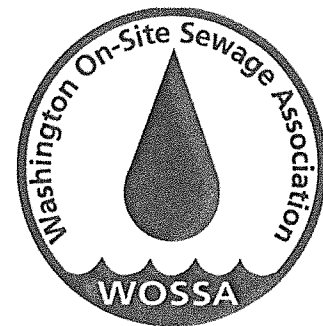
Overall Evaluation	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(If made available, otherwise no ranking here)					
OVERALL EVALUATION					
The training met my need.	5	4	3	2	1
I learned what I needed	5	4	3	2	1
I will recommend the training to others	5	4	3	2	1

COMMENTS

Please comment on any other aspects of the training

Very Good and ~~present~~ presented in a quite personable manner.

WOSSA Trenching and Excavation for OSS – 04.25.17



Name of Attendee: Dylan T. Hirschman

Company: Orcas Sewage Design

Address: 45 plane view Eastsound WA

Tel: 360 324 2612

Location of Training: Orcas Island, WA.
(Circle the appropriate number)

Instructor(s): John Thomas

Trenching & Excavation for OSS: Content	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.) The objectives were clearly stated.	5	4	3	2	1
2.) The material learned was what I needed.	5	4	3	2	1
3.) The training helped me understand important hazards I may encounter in my job.	5	4	3	2	1
4.) Based on what I learned, I will make changes to improve my personal safety for Trenching and Excavation in my job.	5	4	3	2	1
5.) The content was clear and easy to understand.	5	4	3	2	1
STRUCTURE					
6.) The presentation methods were effective.	5	4	3	2	1
7.) The visual aids, handouts or notes were Effective.	5	4	3	2	1
8.) The length of training and each session was About right.	5	4	3	2	1
9.) The training encourages participation.	5	4	3	2	1
10.) I will recommend the training to others	5	4	3	2	1

Overall Evaluation	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(If made available, otherwise no ranking here)					
OVERALL EVALUATION					
The training met my need.	5	4	3	2	1
I learned what I needed	5	4	3	2	1
I will recommend the training to others	5	4	3	2	1

COMMENTS

Please comment on any other aspects of the training

I enjoyed the class because real life situation was used to help understand hazards & dangers of scenarios I find myself in contact with daily. Thank you

WOSSA Trenching and Excavation for OSS – 04.25.17

Name of Attendee: Justin Fransio

Company: Windsor Farm & Excavation

Address: 440 Sunset Ave Eastsound WA

Tel: 360-317-6797



Location of Training: Orcas Island, WA.

Instructor(s): John Thomas

(Circle the appropriate number)

Trenching & Excavation for OSS: Content	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.) The objectives were clearly stated.	(5)	4	3	2	1
2.) The material learned was what I needed.	(5)	4	3	2	1
3.) The training helped me understand important hazards I may encounter in my job.	(5)	4	3	2	1
4.) Based on what I learned, I will make changes to improve my personal safety for Trenching and Excavation in my job.	(5)	4	3	2	1
5.) The content was clear and easy to understand.	(5)	4	3	2	1
STRUCTURE					
6.) The presentation methods were effective.	(5)	4	3	2	1
7.) The visual aids, handouts or notes were Effective.	(5)	4	3	2	1
8.) The length of training and each session was About right.	(5)	4	3	2	1
9.) The training encourages participation.	(5)	4	3	2	1
10.) I will recommend the training to others	(5)	4	3	2	1

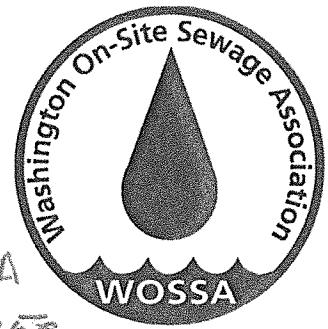
Overall Evaluation	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(If made available, otherwise no ranking here)					
OVERALL EVALUATION					
The training met my need.	(5)	4	3	2	1
I learned what I needed	(5)	4	3	2	1
I will recommend the training to others	(5)	4	3	2	1

COMMENTS

Please comment on any other aspects of the training

Pictures where great / Even a few more would be good. Knowing the full back story to the pictures was good. Stories of Real Jobs is awesome.

WOSSA Trenching and Excavation for OSS – 04.25.17



Name of Attendee: Gary Covington

Company: SJ County Health

Address: Po Box 122 Friday Harbor WA

Tel: 360 370-7519 98258

Location of Training: Orcas Island, WA.

Instructor(s): John Thomas

(Circle the appropriate number)

Trenching & Excavation for OSS: Content	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.) The objectives were clearly stated.	(5)	4	3	2	1
2.) The material learned was what I needed.	(5)	4	3	2	1
3.) The training helped me understand important hazards I may encounter in my job.	(5)	4	3	2	1
4.) Based on what I learned, I will make changes to improve my personal safety for Trenching and Excavation in my job.	(5)	4	3	2	1
5.) The content was clear and easy to understand.	(5)	4	3	2	1
STRUCTURE					
6.) The presentation methods were effective.	(5)	4	3	2	1
7.) The visual aids, handouts or notes were Effective.	(5)	4	3	2	1
8.) The length of training and each session was About right.	5	(4)	3	2	1
9.) The training encourages participation.	5	(4)	3	2	1
10.) I will recommend the training to others	(5)	4	3	2	1

Overall Evaluation	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(If made available, otherwise no ranking here)					
OVERALL EVALUATION					
The training met my need.	(5)	4	3	2	1
I learned what I needed	(5)	4	3	2	1
I will recommend the training to others	(5)	4	3	2	1

COMMENTS

Please comment on any other aspects of the training

A few examples to begin with reference to
WAC's interspersed might make the
presentation a little more engaging during
the earlier parts

WOSSA Trenching and Excavation for OSS – 04.25.17

Name of Attendee: Balthan Shaw

Company: Shaw Excavation

Address: PO Box 953 Eastsound WA 98245

Tel: 360 317 6220



Location of Training: Orcas Island, WA.

Instructor(s): John Thomas

(Circle the appropriate number)

Trenching & Excavation for OSS: Content	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.) The objectives were clearly stated.	5	4	3	2	1
2.) The material learned was what I needed.	5	4	3	2	1
3.) The training helped me understand important hazards I may encounter in my job.	5	4	3	2	1
4.) Based on what I learned, I will make changes to improve my personal safety for Trenching and Excavation in my job.	5	4	3	2	1
5.) The content was clear and easy to understand.	5	4	3	2	1
STRUCTURE					
6.) The presentation methods were effective.	5	4	3	2	1
7.) The visual aids, handouts or notes were Effective.	5	4	3	2	1
8.) The length of training and each session was About right.	5	4	3	2	1
9.) The training encourages participation.	5	4	3	2	1
10.) I will recommend the training to others	5	4	3	2	1

Overall Evaluation	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(If made available, otherwise no ranking here)					
OVERALL EVALUATION					
The training met my need.	5	4	3	2	1
I learned what I needed	5	4	3	2	1
I will recommend the training to others	5	4	3	2	1

COMMENTS

Please comment on any other aspects of the training

This was very well done and easy to follow. The most important things (deaths and what causes them + how to lower risk) were talked about in detail w/ efficiency. The efficiency is important to keep people focused

WOSSA Trenching and Excavation for OSS – 04.25.17

Name of Attendee: Andrew Saxe

Company: Astechpros.

Address: P.O. Box 125 Deer Harbor WA. 98243

Tel: 360.298.2007



Location of Training: Orcas Island, WA.
(Circle the appropriate number)

Instructor(s): John Thomas

Trenching & Excavation for OSS: Content	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.) The objectives were clearly stated.	(5)	4	3	2	1
2.) The material learned was what I needed.	(5)	4	3	2	1
3.) The training helped me understand important hazards I may encounter in my job.	(5)	4	3	2	1
4.) Based on what I learned, I will make changes to improve my personal safety for Trenching and Excavation in my job.	(5)	4	3	2	1
5.) The content was clear and easy to understand.	(5)	4	3	2	1
STRUCTURE					
6.) The presentation methods were effective.	(5)	4	3	2	1
7.) The visual aids, handouts or notes were Effective.	(5)	4	3	2	1
8.) The length of training and each session was About right.	5	(4)	3	2	1
9.) The training encourages participation.	(5)	4	3	2	1
10.) I will recommend the training to others	(5)	4	3	2	1

Overall Evaluation	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(If made available, otherwise no ranking here)					
OVERALL EVALUATION					
The training met my need.	(5)	4	3	2	1
I learned what I needed	(5)	4	3	2	1
I will recommend the training to others	(5)	4	3	2	1

COMMENTS

Please comment on any other aspects of the training

- Thanks! good class.

WOSSA Trenching and Excavation

Name of Attendee: RICARDO B. FRANCA

Company: RIVER CITY ENV.

Address: 5410 NE 109TH AVE - PDX

Tel: (503) 252-6144



Location of Training: Portland, OR
(Circle the appropriate number)

Instructor(s): John Thomas

CONTENT	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.) The objectives were clearly stated.	(5)	4	3	2	1
2.) The material learned was what I needed.	(5)	4	3	2	1
3.) The training helped me understand important Information or develop necessary skills for my Job.	(5)	4	3	2	1
4.) The depth of the training satisfied the need for The skill level required.	(5)	4	3	2	1
5.) The content was clear and easy to understand.	(5)	4	3	2	1
STRUCTURE					
6.) The presentation methods were effective.	(5)	4	3	2	1
7.) The visual aids, handouts or notes were Effective.	(5)	4	3	2	1
8.) The length of training and each session was About right.	(5)	4	3	2	1
9.) The training encourages participation.	(5)	4	3	2	1

Overall Evaluation	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(If made available, otherwise no ranking here)					
OVERALL EVALUATION					
The training met my need.	(5)	4	3	2	1
I learned what I needed	(5)	4	3	2	1
I will recommend the training to others	(5)	4	3	2	1

COMMENTS

Please comment on any other aspects of the training

THANK YOU JOHN WAS A GREAT CLASS.

WOSSA Trenching and Excavation for OSS

Name of Attendee: Robert Olin
 Company: Bob's Water & Septic
 Address: 6104 S Maxwellton Rd
 Tel: 360-321-7696



Location of Training: Oak Harbor, Washington
 (Circle the appropriate number)

Instructor(s): John Thomas

TRAINING: CONTENT	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.) The objectives were clearly stated.	(5)	4	3	2	1
2.) The material learned was what I needed.	(5)	4	3	2	1
3.) The training helped me understand important hazards I may encounter in my job.	(5)	4	3	2	1
4.) Based on what I learned, I will make changes to improve my personal safety for trenching and excavation in my job.	(5)	4	3	2	1
5.) The content was clear and easy to understand.	(5)	4	3	2	1
STRUCTURE					
6.) The presentation methods were effective.	(5)	4	3	2	1
7.) The visual aids, handouts or notes were Effective.	(5)	4	3	2	1
8.) The length of training and each session was About right.	(5)	4	3	2	1
9.) The training encourages participation.	(5)	4	3	2	1
10.) I will recommend the training to others	(5)	4	3	2	1

Overall Evaluation	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(If made available, otherwise no ranking here)					
OVERALL EVALUATION					
The training met my need.	(5)	4	3	2	1
I learned what I needed	(5)	4	3	2	1
I will recommend the training to others	(5)	4	3	2	1

COMMENTS

Please comment on any other aspects of the training

WOSSA Trenching and Excavation for OSS

bruce@silviaco.com

Name of Attendee: BRUCE SILVIA

Company: SILVIA SEPTIC SERVICE LLC

Address: 648 Midway Loop
OAK HARBOR WA 98277

Tel: 360-679-6545



Location of Training: Oak Harbor, Washington
(Circle the appropriate number)

Instructor(s): John Thomas

TRAINING: CONTENT	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.) The objectives were clearly stated.	(5)	4	3	2	1
2.) The material learned was what I needed.	(5)	4	3	2	1
3.) The training helped me understand important hazards I may encounter in my job.	(5)	4	3	2	1
4.) Based on what I learned, I will make changes to improve my personal safety for trenching and excavation in my job.	5	(4)	3	2	1
5.) The content was clear and easy to understand.	(5)	4	3	2	1
STRUCTURE					
6.) The presentation methods were effective.	(5)	4	3	2	1
7.) The visual aids, handouts or notes were Effective.	(5)	4	3	2	1
8.) The length of training and each session was About right.	(5)	4	3	2	1
9.) The training encourages participation.	(5)	4	3	2	1
10.) I will recommend the training to others	(5)	4	3	2	1

Overall Evaluation	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(If made available, otherwise no ranking here)					
OVERALL EVALUATION					
The training met my need.	(5)	4	3	2	1
I learned what I needed	(5)	4	3	2	1
I will recommend the training to others	(5)	4	3	2	1

COMMENTS

Please comment on any other aspects of the training