1067-2D-AOLE

SITE HEALTH AND SAFETY PLAN (*HASP*)

Office: Okemos, MI
Site Name: River Bend, Detroit Windshield Survey
Client: U.S. Environmental Protection Agency
Work Location: E. Jefferson Ave and Newport St., Detroit, Michigan 48206
WO#: 20405.012.001.1067.00

US EPA RECORDS CENTER REGION 5
428024

The information contained in this document is the property of Weston Solutions, Inc. and may not be used or reproduced in any form without the written permission of Weston Solutions, Inc

SITE HEALTH AND SAFETY PLAN (HASP)

Review and Approval Documentation:

Reviewed by: SO/DSM/CHS	Tonya Balla Name (Print)	Signature	Date: 6/25/10
Other	Name (Print)	Signature	Date:
Approved by: Project Manager	Lori Kozel Name (Print)	Signature	Date:

Hazard Assessment and Equipment Selection:

In accordance with WESTON's Personal Protective Equipment Program and 29 CFR 1910.132, at the site prior to personnel beginning work, the SHSC and/or the Site Manager have evaluated conditions and verified that the personal protective equipment selection outlined within this HASP is appropriate for the hazards known or expected to exist. (Refer to Safety Officer Manual Section 2, Personal Protection Program, for guidance.)

☒ **FSO**	Matt Beer Name	Signature	Date:
☐ **Site Manager**	Name	Signature	Date:
☐ **Environmental Compliance Officer**	Name	Signature	Date:
☐ **Dangerous Goods Shipping Coordinator**	Name	Signature	Date:

Project start date: June 28, 2010 End date: June 30, 2010	This site HASP **must** be **reissued/reapproved** for any activities conducted after: Date: December 31, 2010	Amendment date(s)	By:
		1.	
		2.	
		3.	
		4.	
		5.	

SITE HEALTH AND SAFETY PLAN (HASP)

Prepared by: Steven Kidder	W.O. Number: 20405.012.001.1067.00	Date 6/21/2010

Project Identification
Office: Okemos, MI
Site Name: Euclid St – Detroit Windshield Survey
Client: U.S. Environmental Protection Agency
Work Location Address: E. Jefferson and Newport St., Detroit, MI

Site History: The River Bend property located at between E. Jefferson Ave and Newport St. is a vacant, open lot with overgrown vegetation. The property contains no buildings or structures.

Scope of Work: Assessment and documentation of potential threats to human health and the environment. Soils on site will be analyzed with a XRF and collect up to (50) samples.

☐ Site visit only; site HASP not necessary. List personnel here and sign off below:

Regulatory Status:

Site regulatory status:

CERCLA/SARA	RCRA	Other Federal Agency
☒ U.S. EPA	☐ U.S. EPA	☐ DOE
☐ State	☐ State	☐ USACE
☐ NPL Site	NRC	☐ Air Force
☐ OSHA	☐ 10 CFR 20	☐ ____

Hazard Communication (Req'd See Attachment D)
☒ 1910 ☒ 1926 ☐ State

Safety Officer Manual (Required to be On-Site)
Based on the Hazard Assessment and Regulatory Status, determine the Standard HASP(s) applicable to this project. Indicate below which Standard HASP will be used and append the appropriate pages of this form along with the Standard Plan.

☐ Stack Test ☐ ____
☐ Air Emissions ☐ ____
☐ Asbestos ☐ ____
☐ Industrial Hygiene ☐ ____
☐ ____ ☐ ____

Review and Approval Documentation:

Reviewed by:
SO/DSM/CHS Tonya Balla Date: 6/25/10
Name (Print) Signature

Other Date: ____
Name (Print) Signature

Approved by: Lori Kozel
Project Manager Date: ____
Name (Print) Signature

Hazard Assessment and Equipment Selection:

In accordance with WESTON's Personal Protective Equipment Program and 29 CFR 1910.132, at the site prior to personnel beginning work, the SHSC and/or the Site Manager have evaluated conditions and verified that the personal protective equipment selection outlined within this HASP is appropriate for the hazards known or expected to exist. (Refer to Safety Officer Manual Section 2, Personal Protection Program, for guidance.)

☒ **FSO** Matt Beer Date: ____
Name Signature

☐ **Site Manager** Date: ____

☐ **Environmental Compliance Officer** Date: ____

☐ **Dangerous Goods Shipping Coordinator** Date: ____
Name Signature

Project start date: June 28, 2010 End date: TBD	This site HASP **must** be **reissued/reapproved** for any activities conducted after: Date: December 31, 2010	Amendment date(s) 1. 2. 3.	By:

Vehicle Use Assessment and Selection
Driving is one of the most hazardous and frequent activities for WESTON Employees. The most appropriate type vehicle(s) authorized for use on this project is/are: 1. Personal/Rental car 2. 3. 4.
The following Project Team Member's qualifications and experience in driving these types of vehicles was evaluated and found to be acceptable (indicate vehicle type(s) number next to employee name). 1. Matt Beer (1) 2. Steven Kidder(1) 3. Lori Kozel (1)
The project site was evaluated and a **Traffic Control Plan** ☐ is required ☒ is not required. If required, the **Traffic Control Plan** can be found in Attachment H.

TABLE OF CONTENTS

Section **Page**

1. PERSONNEL ON SITE INFORMATION 1-1
1.1 WESTON REPRESENTATIVES 1-2
1.2 WESTON SUBCONTRACTORS 1-2
1.3 SITE PERSONNEL AND CERTIFICATION STATUS 1-3
1.3.1 Weston Employee Certification 1-3
1.3.2 Subcontractor's Health and Safety Program Evaluation 1-4
2. HEALTH AND SAFETY EVALUATION 2-1
2.1 HEALTH AND SAFETY EVALUATION 2-2
2.1.1 Task Hazard Assessment 2-2
2.1.2 Chemical Hazards of Concern 2-3
2.1.3 Biological Hazards of Concern 2-4
2.1.4 Radiation Hazards of Concern 2-5
2.1.5 Physical Hazards of Concern 2-6
3. TASK BY TASK ASSESMENT 3-1
3.1 TASK-BY-TASK RISK ASSESSMENT 3-2
3.1.1 Task 1 Description 3-2
3.1.2 Task 2 Description 3-3
3.1.3 Task 3 Description ..... **Error! Bookmark not defined.**
3.1.4 Task 4 Description ..... **Error! Bookmark not defined.**
3.1.5 Task 4 Description ..... **Error! Bookmark not defined.**
3.2 PERSONNEL PROTECTION PLAN 3-4
3.3 DESCRIPTION OF LEVELS OF PROTECTION 3-5
4. MONITORING PROGRAM 4-1
4.1.1 Air Monitoring Instruments 4-2
4.1.1 Air Monitoring Instruments Calibration Record 4-3
4.2 SITE AIR MONITORING PROGRAM 4-4
4.3 ACTION LEVELS 4-5
5. HOSPITAL INFORMATION 5-1
5.1 CONTINGENCIES 5-2
5.1.1 Emergency Contacts and Phone Numbers 5-2
5.1.2 Hospital Map 5-4
5.1.3 Response Plans 5-5
6. DECONTAMINATION PLAN 6-1
6.1 GENERAL DECONTAMINATION PLAN 6-2
6.2 LEVEL D DECONTAMINATION PLAN 6-3
6.3 LEVEL C DECONTAMINATION PLAN 6-4
6.4 LEVEL B DECONTAMINATION PLAN 6-5
7. TRAINING AND BRIEFING TOPICS/SIGN OFF SHEET 7-1
7.1 TRAINING AND BRIEFING TOPICS 7-2
7.2 HEALTH AND SAFETY PLAN APPROVAL/SIGNOFF FORM 7-3

ATTACHMENTS

ATTACHMENT A	Chemical Contaminants Data Sheets
ATTACHMENT B	Material Safety Data Sheets
ATTACHMENT C	Safety Procedures/Field Operating Procedures (FLD Ops)
ATTACHMENT D	Hazard Communication Program
ATTACHMENT E	Air Sampling Data Sheets
ATTACHMENT F	Incident Reporting
ATTACHMENT G	AHA Checklist and Environmental Compliance
ATTACHMENT H	Traffic Control Plan
ATTACHMENT I	Audit Forms
ATTACHMENT J	Environmental Health & Safety Inspection Checklist
ATTACHMENT K	Environmental Protection and Sustainability Program Impact Checklist

1. PERSONNEL ON SITE INFORMATION

1.1 WESTON REPRESENTATIVES

Organization/Branch	Name/Title	Address	Telephone
Weston / OMI	Steven Kidder	2501 Jolly Road Suite 100 Okemos, Michigan 4886	517-381-5920
Weston/ DET	Lori Kozel Matt Beer	7800W. Outer Dr. Suite 200 Detroit, Michigan 48235	313-739-2500

Roles and Responsibilities:

Matt Beer will be the Site Lead.

Steven Kidder will provide field support.
Lori Kozel is the project manager.

1.2 WESTON SUBCONTRACTORS

Organization/Branch	Name/Title	Address	Telephone
		7	
	Name: Title:	Street: City: State, Zip:	
	Name: Title:	Street: City: State, Zip:	

Roles and Responsibilities:

SITE-SPECIFIC HEALTH AND SAFETY PERSONNEL

The Site Field Safety Officer (FSO) for activities to be conducted at this site is: Matt Beer

The FSO has total responsibility for ensuring that the provisions of this Site HASP are adequate and implemented in the field.

Changing field conditions may require decisions to be made concerning adequate protection programs. Therefore, the personnel assigned as FSOs are experienced and meet the additional training requirements specified by OSHA in 29 CFR 1910.120.

Qualifications:
40-hour HAZWOPER training, current 8-hour Refresher, 8-hour FSO training, FA/CPR, fit tested, and current medical clearance.

Designated alternates include: Steven Kidder, Lori Kozel

1.3 SITE PERSONNEL AND CERTIFICATION STATUS

1.3.1 Weston Employee Certification

Name: Lori Kozel **Title: Project Manger** **Task(s): ALL** **Certification Level or Description:** ☒Medical Current ☒Training Current ☐Fit Test Current (Qual.) ☒Fit Test Current (Quant.)	**Name:** **Title:** **Task(s):** **Certification Level or Description:** ☐Medical Current ☐Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)
Name: Steven Kidder **Title: Project Scientist** **Task(s): ALL** **Certification Level or Description:** ☒Medical Current ☒Training Current ☐Fit Test Current (Qual.) ☒Fit Test Current (Quant.)	**Name:** **Title:** **Task(s):** **Certification Level or Description:** ☐Medical Current ☐Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)
Name: Matt Beer **Title: Project Scientist** **Task(s): ALL** **Certification Level or Description:** ☒Medical Current ☒Training Current ☐Fit Test Current (Qual.) ☒Fit Test Current (Quant.)	**Name:** **Title:** **Task(s):** **Certification Level or Description:** ☐Medical Current ☐Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)
Name: **Title:** **Task(s):** **Certification Level or Description:** ☐Medical Current ☐Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)	**Name:** **Title:** **Task(s): Certification Level or Description:** ☐Medical Current ☐Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)
Name: **Title:** **Task(s):** **Certification Level or Description:** ☐Medical Current ☐Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)	**Name:** **Title:** **Task(s):** **Certification Level or Description:** ☐Medical Current ☐Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)
Name: **Title:** **Task(s):** **Certification Level or Description:** ☐Medical Current ☐Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant)	**Name:** **Title:** **Task(s):** **Certification Level or Description:** ☐Medical Current ☐Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)

TRAINING CURRENT - Training: All personnel, including visitors, entering the exclusion or contamination reduction zones must have certifications of completion of training in accordance with OSHA 29 CFR 1910, 29 CFR 1926, or 29 CFR 1910.120.

FIT TEST CURRENT - Respirator Fit Testing: All persons, including visitors, entering any area requiring the use or potential use of any negative pressure respirator must have had, as a minimum, a qualitative fit test, administered in accordance with OSHA 29 CFR 1910.134 or ANSI, within the last 12 months. If site conditions require the use of a full-face, negative-pressure, air-purifying respirator for protection from asbestos or lead, employees must have had a qualitative fit test, administered according to OSHA 29 CFR 1910.1001 or 1025/1926, within the last 6 months.

MEDICAL CURRENT - Medical Monitoring Requirements: All personnel, including visitors, entering the exclusion or contamination reduction zones must be certified as medically fit to work and to wear a respirator, if appropriate, in accordance with 29 CFR 1910, 29 CFR 1926/1910, or 29 CFR 1910.120.

The Site Field Safety Officer is responsible for verifying all certifications and fit tests.

SITE PERSONNEL AND CERTIFICATION STATUS

1.3.2 Subcontractor's Health and Safety Program Evaluation

Name of Subcontractor:
Address:

Activities To Be Conducted by Subcontractor:

Evaluation Criteria

Medical program meets OSHA/WESTON criteria ☐ Acceptable ☐ Unacceptable Comments:	Personal protective equipment available ☐ Acceptable ☐ Unacceptable Comments:	On-site monitoring equipment available, calibrated, and operated properly ☐ Acceptable ☐ Unacceptable Comments:
Safe working procedures clearly specified ☐ Acceptable ☐ Unacceptable Comments:	Training meets OSHA/WESTON criteria ☐ Acceptable ☐ Unacceptable Comments:	Emergency procedures ☐ Acceptable ☐ Unacceptable Comments:
Decontamination procedures ☐ Acceptable ☐ Unacceptable Comments:	General health and safety program evaluation ☐ Acceptable ☐ Unacceptable Comments:	Additional comments: ☐ Subcontractor has agreed to and will conform with the WESTON HASP for this project. ☐ Subcontractor will work under his own HASP, which has been accepted by project PM.

Evaluation Conducted by: Certifications for all subcontractors personnel will be added to the HASP prior to beginning work. **Date:**

Subcontractor

Name: **Title:** **Task(s):** **Certification Level or Description:** ☐ Medical Current ☐ Training Current ☐ Fit Test Current (Qual) ☐ Fit Test Current (Quant)	**Name:** **Title:** **Task(s):** **Certification Level or Description:** ☐ Medical Current ☐ Training Current ☐ Fit Test Current (Qual) ☐ Fit Test Current (Quant)
Name: **Title:** **Task(s):** **Certification Level or Description:** ☐ Medical Current ☐ Training Current ☐ Fit Test Current (Qual) ☐ Fit Test Current (Quant)	**Name:** **Title:** **Task(s):** **Certification Level or Description:** ☐ Medical Current ☐ Training Current ☐ Fit Test Current (Qual) ☐ Fit Test Current (Quant.)

2. HEALTH AND SAFETY EVALUATION

2.1 HEALTH AND SAFETY EVALUATION

2.1.1 Task Hazard Assessment

Background Review: ☐ Complete ☒ Partial If partial why? Site assessment, limited info provided by U.S. EPA

Activities Covered Under This Plan:

No.	Task/Subtask	Description	Schedule
1	**XRF metals screening**	**The Site area will be broken into a grid and the soil will be screened with a XRF. All XRF screening will be conducted in Level-D.**	**06/28/10 – 06/30/10**
2	**Soil sample collection**	**Collect up to (50) soil samples in the areas of highest XRF readings. All soil sampling will be conducted in Level-D.**	**06/28/10 – 06/30/10**

Types of Hazards:

Numbers refer to one of the following hazard evaluation forms. Complete hazard evaluation forms for each appropriate hazard class.

Physiochemical 1

- ☐ Flammable
- ☐ Explosive
- ☐ Corrosive
- ☐ Reactive
- ☐ O_2 Rich
- ☐ O_2 Deficient

Chemically Toxic 1

- ☒ Inhalation
- ☒ Ingestion
- ☒ Contact
- ☐ Absorption
- ☐ Carcinogen
- ☐ Mutagen
- ☐ Teratogen
- ☐ OSHA 1910.1000 Substance (Air Contaminants)
- ☐ OSHA Specific Hazard Substance Standard (Refer to following page for listing)

Radiation 3

Ionizing:

- ☒ Internal exposure
- ☒ External exposure

Non-ionizing:

- ☒ UV
- ☐ IR
- ☐ RF
- ☐ MicroW
- ☐ Laser

Biological 2

- ☒ Etiological Agent
- ☒ Other (plant, insect, animal)

☐ **Physical Hazards 4**

- ☐ Construction Activities

Source/Location of Contaminants and Hazardous Substances:

Directly Related to Tasks

- ☐ Air
- ☐ Other Surface
- ☐ Groundwater
- ☒ Soil
- ☐ Surface Water
- ☐ Sanitary Wastewater
- ☐ Process Wastewater
- ☐ Other

Indirectly Related to Tasks — Nearby Process(es) That Could Affect Team Members:

- ☒ Client Facility/WESTON Work Location
- ☐ Nearby Non-Client Facility

Describe:

☒ Have activities (task[s]) been coordinated with facility?

Comments:

U.S. EPA OSC coordinating site access.

HEALTH AND SAFETY EVALUATION

2.1.2 Chemical Hazards of Concern

☐ N/A

Chemical Contaminants of Concern

Provide the data requested for chemical contaminants on HASP Form 25 or attach data sheets from an acceptable source such as NIOSH pocket guide, condensed chemical dictionary, ACGIH TLV booklet, etc. List chemicals and concentrations below and locate data sheets in Attachment B of this HASP.

☐ N/A

Identify hazardous materials used or on-site and attach Material Safety Data Sheets (MSDSs) for all reagent type chemicals, solutions, or other identified materials that in normal use in performing tasks related to this project could produce hazardous substances. Ensure that all subcontractors and other parties working nearby are informed of the presence of these chemicals and the location of the MSDSs. Obtain from subcontractors and other parties, lists of the hazardous materials they use or have on-site and identify location of the MSDSs here. List chemicals and quantities below and locate MSDSs in Attachment B of this HASP.

Chemical Name	Concentration ( )	Chemical Name	Quantity
Unknown – anticipate metals	**Unknown**	Alconox	Up to 5 gallons diluted solution

OSHA-SPECIFIC HAZARDOUS SUBSTANCES

☐ 1910.1001 Asbestos	☐ 1910.1002 Coal tar pitch volatiles	☐ 1910.1003 4-Nitrobiphenyl, etc.	☐ 1910.1004 alpha-Naphthylamine
☐ 1910.1005 [Reserved]	☐ 1910.1006 Methyl chloromethyl ether	☐ 1910.1007 3,3'-Dichlorobenzidine (and its salts)	☐ 1910.1008 bis-Chloromethyl ether
☐ 1910.1009 beta-Naphthylamine	☐ 1910.1010 Benzidine	☐ 1910.1011 4-Aminodiphenyl	☐ 1910.1012 Ethyleneimine
☐ 1910.1013 beta-Propiolactone	☐ 1910.1014 2-Acetylaminofluorene	☐ 1910.1015 4-Dimethylaminoazobenzene	☐ 1910.1016 N-Nitrosodimethylamine
☐ 1910.1017 Vinyl chloride	☐ 1910.1018 Inorganic arsenic	☐ 1910.1025 Lead (Att. FLD# 46)	☐ 1910.1026 Chromium VI (att. FLD 53)
☐ 1910.1027 Cadmium (Att. 50 FLD)	☐ 1910.1028 Benzene (Att. FLD# 54 or 61)	☐ 1910.1029 Coke oven emissions	☐ 1910.1043 Cotton dust
☐ 1910.1044 1,2-Dibromo-3-chloropropane	☐ 1910.1045 Acrylonitrile	☐ 1910.1047 Ethylene oxide	☐ 1910.1048 Formaldehyde
☐ 1910.1050 Methylenedianiline	☐ 1910.1051 1,3 Butadiene	☐ 1910.1052 Methylene chloride	☐ 1926.60 Methylenedianiline
☐ 1926.62 Lead	☐ 1926.1101 Asbestos (Att. FLD 52)	☐ 1926.1127 Cadmium	

HEALTH AND SAFETY EVALUATION

2.1.3 Biological Hazards of Concern

☒ **Poisonous Plants** (FLD 43-D) Location/Task No(s) **ALL** Source: ☐ Known ☒ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☒ Contact ☐ Direct Penetration Team Member(s) Allergic: ☐ Yes ☒ No Immunization required: ☐ Yes ☒ No	☒ **Insects** (FLD 43-B) Location/Task No(s) **ALL** Source: ☐ Known ☒ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☒ Contact ☒ Direct Penetration Team Member(s) Allergic: ☐ Yes ☒ No Immunization required: ☐ Yes ☒ No
☒ **Snakes, Reptiles** (FLD 43-A) Location/Task No(s) Source: ☐ Known ☐ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☐ Contact ☐ Direct Penetration Team Member(s) Allergic: ☐ Yes ☐ No Immunization required: ☐ Yes ☐ No	☒ **Animals** (FLD 43-A) Location/Task No(s) **ALL** Source: ☐ Known ☒ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☒ Contact ☒ Direct Penetration Team Member(s) Allergic: ☐ Yes ☒ No Immunization required: ☐ Yes ☒ No
FLD 43 — WESTON Biohazard Field Operating Procedures: Att. OP ☐	
☐ **Sewage** Location/Task No(s).: Source: ☐ Known ☐ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☐ Contact ☐ Direct Penetration Team Member(s) Allergic: ☐ Yes ☐ No Immunization required: ☐ Yes ☐ No Tetanus Vaccination within Past 10 yrs: ☐ Yes ☐ No	☐ **Etiologic Agents** (FLD –C) **Mold, Mildew, Fungi** Location/Task No(s).: Source: ☐ Known ☐ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☐ Contact ☐ Direct Penetration Team Member(s) Allergic: ☐ Yes ☐ No Immunization required: ☐ Yes ☐ No
FLD 43-C — Mold and Fungus. Att. OP ☐	
FLD 44 — WESTON Bloodborne Pathogens Exposure Control Plan – First Aid Procedures: Att. OP ☒	
FLD 45 — WESTON Bloodborne Pathogens Exposure Control Plan – Working with Infectious Waste: Att. OP ☐	

HEALTH AND SAFETY EVALUATION

2.1.4 Radiation Hazards of Concern

NONIONIZING RADIATION

Task No.	Type of Nonionizing Radiation	Source On-Site	TLV/PEL	Wavelength Range	Control Measures	Monitoring Instrument
1,2	Ultraviolet	Solar			Appropriate clothing/ sunscreen	None
	Infrared	N/A				
	Radio Frequency	N/A				
	Microwave	N/A				
	Laser	N/A				

IONIZING RADIATION

Task No.	Radionuclide	Major Radiations	Radioactive Half-Life (Years)	DAC (µCii/mL)			Surface Contamination Limit	Monitoring Instrument
				D	W	Y		
1								Innovex XRF

HEALTH AND SAFETY EVALUATION

2.1.5 Physical Hazards of Concern

Physical Hazard Condition	Physical Hazard	Attach OP	WESTON OP Titles
Loud noise	Hearing loss/disruption of communication	☐	Section 7.0 - ECH&S Program Manual Occupational Noise & HC Program
Inclement weather	Rain/humidity/cold/ice/snow/lightning	☒	FLD02 - Inclement Weather
Steam heat stress	Burns/displaced oxygen/wet working surfaces	☐	FLD03 - Hot Process - Steam
Heat stress	Burns/hot surfaces/low pressure steam	☐	FLD04 - Hot Process - LT3
Ambient heat stress	Heat rash/cramps/exhaustion/heat stroke	☒	FLD05 - Heat Stress Prevention/Monitoring
Cold stress	Hypothermia/frostbite	☐	FLD06 - Cold Stress
Cold/wet	Trench/paddy/immersion foot/edema	☒	FLD02 - Inclement Weather
Confined spaces	Falls/burns/drowning/engulfment/electrocution	☐	FLD08 - Confined Space Entry
Industrial Trucks	Fork Lift Truck Safety	☐	FLD09 – Powered Industrial Trucks
Improper lifting	Back strain/abdomen/arm/leg muscle/joint injury	☐	FLD10 - Manual Lifting/Handling Heavy Objects
Uneven surfaces	Vehicle accidents/slips/trips/falls	☒	FLD11 - Rough Terrain
Poor housekeeping	Slips/trips/falls/punctures/cuts/fires	☒	FLD12 - Housekeeping
Structural integrity	Crushing/overhead hazards/compromised floors	☐	FLD13 - Structural Integrity
Improper cylinder handling	Mechanical injury/fire/explosion/suffocation	☐	FLD16 - Pressure Systems - Compressed Gases
Water hazards	Poor visibility/entanglement/drowning/cold stress	☒	FLD17 - Diving
Water hazards	Drowning/heat/cold stress/hypothermia/falls	☐	FLD18 - Operation and Use of Boats
Water hazards	Drowning/frostbite/hypothermia/falls/electrocution	☐	FLD19 - Working Over Water
Vehicle hazards	Struck by vehicle/collision	☐	FLD20 - Traffic
Explosions	Explosion/fire/thermal burns	☐	FLD21 - Explosives
Moving mechanical parts	Crushing/pinch points/overhead hazards/electrocution	☐	FLD22 – Earth Moving Equipment
Moving mech. parts	Overhead hazards/electrocution	☐	FLD23 – Cranes, Rigging, and Slings
Working at elevation	Overhead hazards/falls/electrocution	☐	FLD24 - Aerial Lifts/Man lifts
Working at elevation	Overhead hazards/falls/electrocution	☐	FLD25 - Working at Elevation
Working at elevation	Overhead hazards/falls/electrocution/slips	☐	FLD26 - Ladders
Working at elevation	Slips/trips/falls/overhead hazards	☐	FLD27 - Scaffolding
Trench cave-in	Crushing/falling/overhead hazards/suffocation	☐	FLD28 - Excavating/Trenching
Physiochemical	Explosions/fires from oxidizing, flam./corr. material	☐	FLD30 - Hazardous Materials Use/Storage
Physiochemical	Fire and explosion	☐	FLD31 - Fire Prevention/Response Plan Required
Physiochemical	Fire	☐	FLD32 - Fire Extinguishers Required
Structural integrity	Overhead/electrocution/slips/trips/falls/fire	☐	FLD33 - Demolition
Electrical	Electrocution/shock/thermal burns	☐	FLD34 - Utilities
Electrical	Electrocution/shock/thermal burns	☐	FLD35 - Electrical Safety
Burns/fires	Heat stress/fires/burns	☐	FLD36 - Welding/Cutting/Brazing/Radiography
Impact/thermal	Thermal burns/high pressure impaction/heat stress	☐	FLD37 - Pressure Washers/Sand Blasting
Impaction/electrical	Smashing body parts/pinching/cuts/electrocution	☐	FLD38 - Hand and Power Tools
Poor visibility	Slips/trips/falls	☐	FLD39 - Illumination
Fire/explosion	Burns/impaction	☐	FLD40 - Storage Tank Removal/Decommissioning
Communications	Disruption of communications	☒	FLD41 - Std Hand/Emergency Signals
Energy/release	Unexpected release of energy	☐	FLD42 - Lockout/Tag-out
Biological Hazards	Biological Hazards at site	☒	FLD43 - Biological Hazards
Animals	Animals	☒	FLD43A - Animals
Insects	Stinging and Biting Insects	☒	FLD43B - Stinging and Biting Insects
Molds/Fungi	Molds and Fungi	☐	FLD43C - Molds and Fungi
Hazardous Plants	Hazardous Plants	☒	FLD43D - Hazardous Plants
Etiologic Agents	Etiologic Agents	☐	FLD43E - Etiologic Agents

2.1.5 Physical Hazards of Concern (Continued)

Physical Hazard Condition	Physical Hazard	Attach OP	WESTON OP Titles
Infectious Waste	Infectious Waste at site/BBP/ at site/Infectious Waste	☐	FLD45 – Biological Hazards – Bloodborne Pathogens Exposure Control Plan – Work With Infectious Waste
Biological Hazards/BBP	Biological Hazards/BBP at site/First Aid Providers	☒	FLD44 - Biological Hazards – Bloodborne Pathogens Exposure Control Plan – First Aid Providers
Lead Contaminated sites	Lead poisoning	☒	FLD46 - Control of Exposure to Lead
Puncture/cuts	Cuts/ dismemberment/gouges	☐	FLD47 - Clearing, Grubbing and Logging Operations
Not applicable	Not applicable	☐	FLD48 – Federal, State, Local Regulatory Agency Inspections
Not applicable	Exposure to hazardous matenals/waste	☒	FLD49 – Safe Storage of Samples
Cadmium	Exposure Control	☐	FLD50 – Cadmium Exposure Control Plan
Process Safety Procedure	Safety Procedure	☐	FLD51 – Process Safety Procedure
Asbestos	Asbestos Exposure	☐	FLD52 – Asbestos Exposure Control Plan
Hexavalent Chromium	Exposure Control Plan	☐	FLD53 – Hexavalent Chromium Exposure Control Plan
Benzene	Exposure Control Plan	☐	FLD54 - Benzene Exposure Control Plan
Hydrofluoric acid	Working with HF	☐	FLD55 – Working with Hydrofluoric Acid
Moving drill rig parts	Crushing/pinch points/overhead hazards/electrocution	☐	FLD56 – Drilling Safety
Vehicles/driving	Accidents,/fatigue/cell phone use	☒	FLD 57 – Motor Vehicle Safety
Improper material handling	Back injury/crushing from load shifts/equipment/tools	☐	FLD 58 – Drum Handling Operations
COC decontamination	COCs/slip,trip, and falls/waste generation/environmental compliance/PPE	☒	FLD59 - Decontamination
Drilling hazards	Electrocution/overhead hazards/pinch points	☐	Environmental Remediation Drilling Safety Guideline - 2005
Fatigue	Long work hours	☒	FLD60 – Employee Duty Schedule
Benzene/Gasoline	Benzene exposure	☒	FLD61 – Gasoline Contaminant Exposure

3. TASK BY TASK ASSESMENT

C./

3.1 TASK-BY-TASK RISK ASSESSMENT

3.1.1 Task 1 Description

TASK 1: XRF Metals Screening- The Site area will be broken into a grid and the soils will be screened with a multiRAE and an XRF. All air monitoring and XRF screening will be conducted in Level-D.

EQUIPMENT REQUIRED/USED

Logbook
FSO Manual
Digital Camera
Nitrile gloves
Steel toe Boots
Garbage bags
First Aid Kit
Pin flags
XRF
BBP Kit
Cellphone

POTENTIAL HAZARDS/RISKS

Chemical

☐ Hazard Present Risk Level: ☐ H ☐ M ☒ L

What justifies risk level? No chemicals are known at this time. Work will be minimally instrusive. Personnel will be conducting screening with the multiRAE and the XRF. When feasible, personnel will stand upwind to minimize the potential for particulate inhalation. Gloves will minimize contact risk.

Physical

☒ Hazard Present Risk Level: ☐ H ☒ M ☐ L

What justifies risk level?

Slip, trip, and fall hazards likely exist due to uneven surfaces around the overgrown land. Heat stress possible due to summer heat during the assessment. Personnel will use defensive driving techniques when mobbing to and from the site. Personnel will monitor for heat stress and take frequent breaks and stay hydrated, as appropriate. In addition, personnel will monitor inclement weather conditions and take action accordingly.

Biological

☐ Hazard Present Risk Level: ☐ H ☒ M ☐ L

What justifies risk level?

Biological hazards are anticipated such as insects and poisonous plants (poison ivy). Stray animals could also be present. Personnel will be alert for these hazards and minimize contact. First aid/BBP kit should be available on site to address contact hazard with poisonous plants. Personnel should implement good santiation practices and wash hands as soon as field activities are complete.

RADIOLOGICAL

☒ Hazard Present Risk Level: ☐ H ☐ M ☒ L

What justifies risk level?

Non-ionizing radiation will be present in the form of sunlight. Site personnel should be aware of the hazards and take proper precautions for overexposure. Precautions include sunscreen, working in the shade when possible, taking breaks in the shade, and wearing a hat for head and face protection. Ionizing radiation from the XRF unit being operated nearby may be present. Sampling personnel should wear TLD badges and adhere to proper instrument use.

LEVELS OF PROTECTION/JUSTIFICATION

Site personnel will perform initial reconnaissance and XRF screening in Level D PPE.

SAFETY PROCEDURES REQUIRED AND/OR FIELD OPS UTILIZED

All work will be performed in accordance with the provisions of this HASP, OSHA guidelines, and WESTON Standard Operating Procedures.

3.1 TASK-BY-TASK RISK ASSESSMENT

3.1.2 Task 2 Description

TASK 2: Soil sample collection – Collect up to (50) soil samples from 0 to 12" bgs for the purpose of documenting the unknown threat to human health and the environment. A hand auger will be used to bore 0 -12" bgs. Level D PPE.

EQUIPMENT REQUIRED/USED

Logbook				
Digital Camera	FSO Manual	Nitrile gloves		Disposable plastic scoops
Steel toe Boots		Sample Jars		
First Aid Kit			Garbage bags	Hand auger
BBP Kit				
	Cellphone			

POTENTIAL HAZARDS/RISKS

Chemical

☐ Hazard Present Risk Level: ☐ H ☐ M ☒ L

What justifies risk level?

No chemicals are known at this time. Work will be minimally instrusive. Personnel will be conducting screening with the multiRAE and the XRF. When feasible, personnel will stand upwind to minimize the potential for particulate inhalation. Gloves will minimize contact risk.

Physical

☒ Hazard Present Risk Level: ☐ H ☒ M ☐ L

What justifies risk level?

Slip, trip, and fall hazards likely exist due to uneven surfaces around the farm land. Heat stress possible due to sampling in summer heat during the assessment. Personnel will use defensive driving techniques when mobbing to and from the site. Personnel will monitor for heat stress and take frequent breaks and stay hydrated, as appropriate. In addition, personnel will monitor inclement weather conditions and take action accordingly. Personnel will use proper bending/twisting to minimize ergonomic issues during hand augering activitites.

Biological

☒ Hazard Present Risk Level: ☐ H ☒ M ☐ L

What justifies risk level?

Biological hazards are anticipated such as insects and poisonous plants (poison ivy). Stray animals could also be present. Personnel will be alert for these hazards and minimize contact. First aid/BBP kit should be available on site to address contact hazard with poisonous plants. Personnel should implement good santiation practices and wash hands as soon as field activities are complete.

RADIOLOGICAL

☒ Hazard Present Risk Level: ☐ H ☐ M ☒ L

What justifies risk level?

Non-ionizing radiation will be present in the form of sunlight. Site personnel should be aware of the hazards and take proper precautions for overexposure. Precautions include sunscreen, working in the shade when possible, taking breaks in the shade, and wearing a hat for head and face protection.

LEVELS OF PROTECTION/JUSTIFICATION

Site personnel will complete soil sampling in PPE Level D.

SAFETY PROCEDURES REQUIRED AND/OR FIELD OPS UTILIZED

All work will be performed in accordance with the provisions of this HASP, OSHA guidelines, and WESTON Standard Operating Procedures.

3.2 PERSONNEL PROTECTION PLAN

Engineering Controls
Describe Engineering Controls used as part of Personnel Protection Plan

Task(s)

Administrative Controls
Describe Administrative Controls used as part of Personnel Protection Plan.

Task(s)
1 During initial Site assessment and XRF screening, START will be in Level D PPE including nitrile gloves.
2 During sample collection, START will be in Level D PPE including nitrile gloves.

Work upwind when feasible.

Personal Protective Equipment
Action Levels for Changing Levels of Protection Refer to HASP Form 13, Site Air Monitoring Program—Action Levels Define Action Levels for up or down grade for each task

Task(s)
1 During initial Site assessment and XRF screening, START will be in Level D PPE including nitrile gloves.
2 During sample collection, START will be in Level D PPE including nitrile gloves.

Description of Levels of Protection

Level D		Level D Modified
Task(s): 1		**Task(s):**
☐ Head		☐ Head
☒ Eye and Face	Safety glasses	☐ Eye and Face
☐ Hearing		☐ Hearing
☐ Arms and Legs Only		☐ Arms and Legs Only
☐ Appropriate Work Uniform		☐ Whole Body
☒ Hand – Gloves	Nitrile gloves	☐ Apron
☒ Foot - Safety Boots	Steel toed boots	☐ Hand - Gloves
☐ Fall Protection		☐ Gloves
☐ Flotation		☐ Gloves
☐ Other		☐ Foot - Safety Boots
		☐ Over Boots

3.3 DESCRIPTION OF LEVELS OF PROTECTION

Level C		Level B
Task(s):	**Task(s):**	**Task(s): 1,2**
☐ Head	☐Head	☐ Head
☐ Eye and Face	☐ Eye and Face	☐ Eye and Face
☐ Hearing	☐ Hearing	☐ Hearing
☐ Arms and Legs Only	☐ Arms and Legs Only	☐ Arms and Legs Only
☐ Whole Body	☐ Whole Body	☐ Whole Body
☐ Apron	☐ Apron	☐ Apron
☐ Hand – Gloves	☐ Hand - Gloves	☐ Hand - Gloves
☐ Gloves	☐ Gloves	☐ Gloves
☐ Gloves	☐ Gloves	☐ Gloves
☐ Foot - Safety Boots	☐ Foot - Safety Boots	☐ Foot - Safety Boots
☐ Outer Boots	☐ Outer Boots	☐ Outer Boots
☐ Boots (Other)	☐ Boots (Other)	☐ Boots (Other)
☐ Half Face	☐ SAR - Airline	☐ SAR - Airline
☐ Cart./Canister	☐SCBA	☐ SCBA
☐ Full Face	☐ Comb. Airline/SCBA	☐ Comb. Airline/SCBA
☐ Cart./Canister	☐ Cascade System	☐ Cascade System
☐ PAPR	☐ Compressor	☐ Compressor
☐ Cart./Canister	☐ Fall Protection	☐ Fall Protection
☐ Type C	☐ Flotation	☐ Flotation
☐ Fall Protection	☐ Other	☐ Other
☐ Flotation		
☐ Other		

4. MONITORING PROGRAM

4.1 SITE OR PROJECT HAZARD MONITORING PROGRAM

4.1.1 Air Monitoring Instruments

Instrument Selection and Initial Check Record

Reporting Format: ☐ Field Notebook ☐ Field Data Sheets* ☒ Air Monitoring Log ☒ Trip Report ☐ Other

Instrument	Task No.(s)	Number Required	Number Received	Checked Upon Receipt	Comment	Initials
☐ **RAD**				☐		
☐ GM (Pancake)				☐		
☐ NaI (Micro R)	1	1	1	☒		
☐ ZnS (Alpha Scintillator)				☐		
☐ Other _____				☐		
☐ **PID**				☐		
☐ MiniRAE				☐		
☐ MultiRAE (LEL/O2/H2S/CO/PID)	1,2	1	1	☒		
☐ TVA 1000 (PID/FID)				☐		
☐ Other _____				☐		
☐ **FID**						
☐ TVA 1000 (FID/PID)				☐		
☐ Other _____				☐		
☐ **PDR 1000 (Particulate)**				☐		
☐ **Single Gas Meter (SGM)**				☐		
Specify Chemical: CL2, HCN, NH3				☐		
☐ **Lumex Mercury Analyzer**				☐		
				☐		
				☐		
☐ Detector Tube Pump:				☐		
Specify (MSA, Dräeger, Sensidyne)						
☐ Tubes/type: _____						
☐ Tubes/type: _____						
☐ Tubes/type: _____						
☐ Tubes/type: _____						

4.1 SITE OR PROJECT HAZARD MONITORING PROGRAM

4.1.1 Air Monitoring Instruments Calibration Record

Instrument, Mfg., Model, Equip. ID No.	Date	Time	Calib. Material	Calib. Method Mfg.'s	Other	Initial Setting and Reading	Final Setting and Reading	Calibrator's Initials

4.2 SITE AIR MONITORING PROGRAM

Action Levels

These Action Levels, if not defined by regulation, are some percent (usually 50%) of the applicable PEL/TLV/REL. That number must also be adjusted to account for instrument response factors.

	Tasks	Action Level		Action
☐ **Explosive atmosphere**		Ambient Air Concentration	Confined Space Concentration	
		<10% LEL	0 to 1% LEL	Work may continue. Consider toxicity potential.
		10 to 25% LEL	1 to 10% LEL	Work may continue. Increase monitoring frequency.
		>25% LEL	>10% LEL	Work must stop. Ventilate area before returning.
☐ **Oxygen**		Ambient Air Concentration	Confined Space Concentration	
		<19.5% O_2	<19.5% O_2	Leave area. Re-enter only with self-contained breathing apparatus.
		19.5% to 25% O_2	19.5% to 23.5% O_2	Work may continue. Investigate changes from 21%.
		>25% O_2	>23.5% O_2	Work must stop. Ventilate area before returning.
☐ **Radiation**		< 3 times background		Continue work.
		3 times background to < 1 mR/hour		Radiation above background levels (normally 0.01-0.02 mR/hr) signifies possible radiation source(s) present. Continue investigation with caution. Perform thorough monitoring. Consult with a Health Physicist.
		> 1 mrem/hour		Potential radiation hazard. Evacuate site. Continue investigation only upon the advice of Health Physicist.
☒ **Organic gases and vapors**		0 to 5ppm in the breathing zone – level D. if gasoline contaminants present or suspected, follow FLD 61		Other identified flammable liquids or acids could change action levels – check with H&S personnel as appropriate
☒ **Inorganic gases, vapors, and particulates**	All			If visible dust is present, personnel will work with EPA to suspend work or introduce wetting. Personnel will work upwind when possible.

4.3 ACTION LEVELS

(Attach action level calculations)

5. HOSPITAL INFORMATION

5.1 CONTINGENCIES

5.1.1 Emergency Contacts and Phone Numbers

Agency	Contact	Phone Number
WorkCare WESTON Medical Director WorkCare WESTON Program Administrator	**Dr. Peter Greaney** **Michelle Bui**	**From 6 am to 4:30 pm Pacific Time** call 800-455-6155 dial 0 or extension 175, Michelle Bui to request the on-call clinician.
After-Business Hours Contact (In Case of Emergency Only)		**4:31 p.m. – 5:59 a.m. Pacific Time, all day Saturday, Sunday and Holidays** call 800-455-6155 Dial 3 to reach the after-hours answering service. Request that the service connect you with the on-call clinician or the on-call clinician will return your call within 30 minutes.
WESTON Corporate Environmental Health & Safety Director	**Owen B. Douglass, Jr.**	**610.701.3065** **610.506.5392 (cell)**
WESTON Medical Programs Manager	**Owen B. Douglass, Jr.**	**610.701.3065**
WESTON Health & Safety Division Safety Manager	**Ted Deecke**	847.337.4147
WESTON Health & Safety Local Safety Officer	**Tonya Balla**	847.528.2623
Fire Department	**911**	911
Police Department	**911**	911
WESTON FSO Cell Phone	**Matt Beer**	248-939-7824
WESTON PM Cell Phone	**Lori Kozel**	586-524-0613
Client Site Phone	**Jeff Kimble**	734.740.9013
Site Telephone		
Nearest Telephone		
Poison Control		**(800) 222-1222**

Local Medical Emergency Facility(s)

Name of Hospital: Henry Ford Hospital		
Address: 2799 West Grand Boulevard, Detroit, MI 48202		Phone No.: **313-916-2151**
Name of Contact: Emergency Room		Phone No.: **313-916-2151**
Type of Service: ☐ Physical trauma only ☐ Chemical exposure only ☒ Physical trauma and chemical exposure ☒ Available 24 hours	**Route to Hospital:** **(See Attached)**	**Travel time from site:** 17 minutes **Distance to hospital:** 9.33 miles **Name/no. of 24-hr ambulance service:** 911

Secondary or Specialty Service Provider

Name of Hospital:		
Address:		Phone No.:
Name of Contact:		Phone No.:
Type of Service: ☐ Physical trauma only ☐ Chemical exposure only ☐ Physical trauma and chemical exposure ☐ Available 24 hours	**Route to Hospital (see attached):**	**Travel time from site:** **Distance to hospital:** **Name/no. of 24-hr ambulance service:**

See reporting an incident in Attachment F.

5.1.2 Hospital Map

5.1 CONTINGENCIES

5.1.3 Response Plans

Medical - General	First Aid Kit: ☒ Yes ☐ No Blood Borne Pathogens Kit: ☒ Yes ☐ No	**Type** Standard 20-man and infection control kit	**Location** In Vehicle	Special First-Aid Procedures: Cyanides on-site ☐ Yes ☒ No If yes, contact LMF. Do they have antidote kit? ☐ Yes ☐ No
Provide first aid, if trained; assess and determine need for further medical assistance. Transport or arrange for transport after appropriate decontamination.	Eyewash required ☐ Yes ☒ No	**Type**	**Location**	**HF** on-site ☐ Yes ☒ No If yes, need neutralizing ointment for first-aid kit. Contact LMF.
	Shower required ☐ Yes ☒ No	**Type**	**Location**	

Plan for Response to Spill/Release		**Plan for Response to Fire/Explosion**		**Fire Extinguishers**
In the event of a spill or release, ensure safety, assess situation, and perform containment and control measures, as appropriate.	a. Cleanup per MSDSs if small; or sound alarm, call for assistance, notify Emergency Coordinator b. Evacuate to pre-determined safe place c. Account for personnel d. Determine if team can respond safely e. Mobilize per Site Spill Response Plan	In the event of a fire or explosion, ensure personal safety, assess situation, and perform containment and control measures, as appropriate:	a. Sound alarm and call for assistance, notify Emergency Coordinator b. Evacuate to predetermined safe place c. Account for personnel d. Use fire extinguisher only if safe and trained in its use e. Stand by to inform emergency responders of materials and conditions	Type/Location ABC/Vehicle / / / / / /
Description of Spill Response Gear	Location	Description (Other Fire Response Equipment)		Location

Plan to Respond to Security Problems
Avoid confrontation. Call 911 and allow police to respond to security issues. Alert EPA and WESTON Project and Safety Personnel.

6. DECONTAMINATION PLAN

6.1 GENERAL DECONTAMINATION PLAN

Personnel Decontamination

Consistent with the levels of protection required, step-by-step procedures for personnel decontamination for each level of protection are attached.

Levels of Protection Required for Decontamination Personnel

The levels of protection required for personnel assisting with decontamination will be:

☐ Level B ☐ Level C ☒ Level D

Modifications include:

Disposition of Decontamination Wastes

Provide a description of waste disposition including identification of storage area, hauler, and final disposal site, if applicable

Decontamination wastes will not be generated during this assessment.

Equipment Decontamination

A procedure for decontamination steps required for non-sampling equipment and heavy machinery follows:

Hand auger will be cleaned with Alconox before use on each boring.

Sampling Equipment Decontamination

Sampling equipment will be decontaminated in accordance with the following procedure:

All sampling equipment is disposable and will be discarded at the end of the site assessment.

6.2 LEVEL D DECONTAMINATION PLAN

Check indicated functions or add steps, as necessary:

Function	Description of Process, Solution, and Container
☐ Segregated equipment drop	
☐ Boot cover and glove wash	
☐ Boot cover and glove rinse	
☐ Tape removal - outer glove and boot	
☐ Boot cover removal	
☒ Outer glove removal	If worn then dispose with trash
HOTLINE	
☐ Suit/safety boot wash	
☐ Suit/boot/glove rinse	
☐ Safety boot removal	
☐ Suit removal	
☐ Inner glove wash	
☐ Inner glove rinse	
☐ Inner glove removal	
☐ Inner clothing removal	
CONTAMINATION REDUCTION ZONE (CRZ)/SAFE ZONE BOUNDARY	
☒ Field wash	Wash hands and face with soap and water as soon as possible and before eating or drinking or other hand to mouth activity
☐ Redress	

Disposal Plan, End of Day:

At the end of the day the trash bag with disposable sampling equipment will be closed up and staged in a secure area.

Disposal Plan, End of Week:

Disposal Plan, End of Project:

Material will be disposed of by facility or contractor in an appropriately permitted landfill, if necessary.

6.3 LEVEL B DECONTAMINATION PLAN

Check indicated functions or add steps, as necessary:

Function	Description of Process, Solution, and Container
☐ Segregated equipment drop	
☐ Boot cover and glove wash	
☐ Boot cover and glove rinse	
☐ Tape removal - outer glove and boot	
☐ Boot cover removal	
☐ Outer glove removal	
HOTLINE	
☐ Suit/safety boot wash	
☐ Suit/boot/glove rinse	
☐ Safety boot removal	
☐ Suit removal	
☐ Inner glove wash	
☐ Inner glove rinse	
☐ SCBA Facepiece removal and disconnect	
☐ Inner glove removal	
☐ Inner clothing removal	
CONTAMINATION REDUCTION ZONE (CRZ)/SAFE ZONE BOUNDARY	
☐ Field wash	
☐ Redress	

Disposal Plan, End of Day:

Disposal Plan, End of Week:

Disposal Plan, End of Project:

6.4 LEVEL C DECONTAMINATION PLAN

Check indicated functions or add steps, as necessary:

Function	Description of Process, Solution, and Container
☐ Segregated equipment drop	
☐ Boot cover and glove wash	
☐ Boot cover and glove rinse	
☐ Tape removal - outer glove and boot	
☐ Boot cover removal	
☐ Outer glove removal	
HOTLINE	
☐ Suit/safety boot wash	
☐ Suit/SCBA/boot/glove rinse	
☐ Safety boot removal	
☐ Remove SCBA backpack without disconnecting	
☐ Splash suit removal	
☐ outer glove wash	
☐ Inner glove rinse	
☐ SCBA disconnect and facepiece removal	
☐ Outer glove removal	
☐ Inner clothing removal	
CONTAMINATION REDUCTION ZONE (CRZ)/SAFE ZONE BOUNDARY	
☐ Field wash	
☐ Redress	

Disposal Plan, End of Day:

Disposal Plan, End of Week:

Disposal Plan, End of Project:

7. TRAINING AND BRIEFING TOPICS/SIGN OFF SHEET

7.1 TRAINING AND BRIEFING TOPICS

The following items will be covered at the site-specific training meeting, daily or periodically.

☒ Site characterization and analysis, Sec. 3.0, 29 CFR 1910.120 I	☐ Level A
☒ Physical hazards, HASP Form 07	☐ Level B
☒ Chemical hazards, HASP Form 04	☐ Level C
☒ Animal bites, stings, and poisonous plants	☒ Level D
☒ Etiologic (infectious) agents	☒ Monitoring, 29 CFR 1910.120 (h)
☒ Site control, 29 CFR 1910.120 d	☒ Decontamination, 29 CFR 1910.120 (k)
☐ Engineering controls and work practices, 29 CFR 1910.120 (g)	☒ Emergency response, 29 CFR 1910.120 (l)
☐ Heavy machinery	☒ Elements of an emergency response, 29 CFR 1910.120 (l)
☐ Forklift	☒ Procedures for handling site emergency incidents, 29 CFR 1910.120 (l)
☐ Backhoe	☐ Off-site emergency response, 29 CFR 1910.120 (l)
☐ Equipment	☐ Handling drums and containers, 29 CFR 1910.120 (j)
☐ Tools	☐ Opening drums and containers
☐ Ladder, 29 CFR 1910.27 (d)/29 CFR 1926	☐ Electrical material handling equipment
☐ Overhead and underground utilities	☐ Radioactive waste
☐ Scaffolds	☐ Shock-sensitive waste
☐ Structural integrity	☐ Laboratory waste packs
☐ Unguarded openings - wall, floor, ceilings	☐ Sampling drums and containers
☐ Pressurized air cylinders	☒ Shipping and transport, 49 CFR 172.101, IATA
☒ Personal protective equipment, 29 CFR 1910.120 (g); 29 CFR 1910.134	☐ Tank and vault procedures
☐ Respiratory protection, 29 CFR 1910.120 (g); ANSI Z88.2	☒ Illumination, 29 CFR 1910.120 (m)
☐ Working over water FLD-19	☐ Sanitation, 29 CFR 1910.120 (n)
☐ Boating safety FLD-18	☐ Cold stress
☒ Heat Stress	☐
☒ Proper lifting techniques	☐

7.2 HEALTH AND SAFETY PLAN APPROVAL/SIGNOFF FORM

Site Name: River Bend – Detroit Windshield Surveys	**WO#:** 20405.012.001.1067.00
Address: E Jefferson Ave and Newport St., Detroit, MI	

I understand, agree to, and will conform with the information set forth in this Health and Safety Plan (and attachments) and discussed in the personnel health and safety briefing(s).

Name	Signature	Date
Lori Kozel		7-7-10
Matthew Beer		7/7/10
Teria A. Edwards		7/7/10
Robert G. Brown		7/7/10

ATTACHMENT A
CHEMICAL CONTAMINANTS DATA SHEETS

Insert sheets on following page

MATERIAL SAFETY DATA SHEETS

(ATTACH MSDSS)

Insert documents on following page.

ATTACHMENT C

SAFETY PROCEDURES/FIELD OPERATING PROCEDURES (FLD OPS)

Insert documents on following page.

ATTACHMENT D
HAZARD COMMUNICATION PROGRAM

SITE-SPECIFIC HAZARD COMMUNICATION PROGRAM

Location-Specific Hazard Communication Program/Checklist

To ensure an understanding of and compliance with the Hazard Communication Standard, WESTON will use this checklist/document (or similar document) in conjunction with the WESTON Written Hazard Communication Program as a means of meeting site- or location-specific requirements.

While responsibility for activities within this document reference the WESTON Safety Officer (SO), it is the responsibility of all personnel to effect compliance. Responsibilities under various conditions can be found within the WESTON Written Hazard Communication Program.

To ensure that information about the dangers of all hazardous chemicals used by WESTON are known by all affected employees, the following Hazard Communication Program has been established. All affected personnel will participate in the Hazard Communication Program. This written program, as well as WESTON's Corporate Hazard Communication Program, will be available for review by any employee, employee representative, representative of OSHA, NIOSH, or any affected employer/employee on a multi-employer site.

☐ Site or other location name/address: E Jefferson Ave and Newport St., Detroit, Michigan 48206

☐ Site/Project/Location Manager: Lori Kozel

☐ Site/Location Safety Officer: Matt Beer

☐ List of chemicals compiled, format: ☒ HASP ☐ Other: _____

☐ Location of MSDS files: HASP

☐ Training conducted by: Name: _____ Date: _____

☐ Indicate format of training documentation: ☐ Field Log: ☐ Other: _____

☐ Client briefing conducted regarding hazard communication: _____

☐ If multi-employer site (client, subcontractor, agency, etc.), indicate name of affected companies:

_____

☐ Other employer(s) notified of chemicals, labeling, and MSDS information: _____

☐ Has WESTON been notified of other employer's or client's hazard communication program(s), as necessary? ☐ Yes ☐ No

List of Hazardous Chemicals

A list of known hazardous chemicals used by WESTON personnel must be prepared and attached to this document or placed in a centrally identified location with the MSDSs. Further information on each chemical may be obtained by reviewing the appropriate MSDS. The list will be arranged to enable cross-reference with the MSDS file and the label on the container. The SO or Location Manager is responsible for ensuring the chemical listing remains up-to-date.

Container Labeling

The WESTON SO will verify that all containers received from the chemical manufacturer, importer, or distributor for use on-site are clearly labeled.

The SO is responsible for ensuring that labels are placed where required and for comparing MSDSs and other information with label information to ensure correctness.

Material Safety Data Sheets (MSDSs)

The SO is responsible for establishing and monitoring WESTON's MSDS program for the location. The SO will ensure that procedures are developed to obtain the necessary MSDSs and will review incoming MSDSs for new or significant health and safety information. He/she will see that any new information is passed on to the affected employees. If an MSDS is not received at the time of initial shipment, the SO will call the manufacturer and have an MSDS delivered for that product in accordance with the requirements of WESTON's Written Hazard Communication Program.

A log for, and copies of, MSDSs for all hazardous chemicals in use will be kept in the MSDS folder at a location known to all site workers. MSDSs will be readily available to all employees during each work shift. If an MSDS is not available, immediately contact the WESTON SO or the designated alternate. When a revised MSDS is received, the SO will immediately replace the old MSDS.

Employee Training and Information

The SO is responsible for the WESTON site-specific personnel training program. The SO will ensure that all program elements specified below are supplied to all affected employees.

At the time of initial assignment for employees to the work site, or whenever a new hazard is introduced into the work area, employees will attend a health and safety meeting or briefing that includes the information indicated below.

- Hazardous chemicals present at the work site.
- Physical and health risks of the hazardous chemicals.
- The signs and symptoms of overexposure.
- Procedures to follow if employees are overexposed to hazardous chemicals.
- Location of the MSDS file and Written Hazard Communication Program.
- How to determine the presence or release of hazardous chemicals in the employee's work area.
- How to read labels and review MSDSs to obtain hazard information.
- Steps WESTON has taken to reduce or prevent exposure to hazardous chemicals.
- How to reduce or prevent exposure to hazardous chemicals through the use of controls procedures, work practices, and personal protective equipment.
- Hazardous, nonroutine tasks to be performed (if any).
- Chemicals within unlabeled piping (if any).

Hazardous Nonroutine Tasks

When employees are required to perform hazardous nonroutine tasks, the affected employee(s) will be given information by the SO about the hazardous chemicals he or she may use during such activity. This information will include specific chemical hazards, protective and safety measures the employee can use, and steps WESTON is using to reduce the hazards. These steps include, but are not limited to, ventilation, respirators, presence of another employee, and emergency procedures.

Chemicals in Unlabeled Pipes

Work activities may be performed by employees in areas where chemicals are transferred through unlabeled pipes. Prior to starting work in these areas, the employee will contact the SO, at which time information as to the chemical(s) in the pipes, potential hazards of the chemicals or the process involved, and the safety precautions that should be taken will be determined and presented.

Multi-Employer Work Sites

It is the responsibility of the SO to provide other employers with information about hazardous chemicals imported by WESTON to which their employees may be exposed, along with suggested safety precautions. It is also the responsibility of the SO and the Site Manager to obtain information about hazardous chemicals used by other employers to which WESTON employees may be exposed. WESTON's chemical listing will be made available to other employers, as requested. MSDSs will be available for viewing, as necessary.

The location, format, and/or procedures for accessing MSDS information must be relayed to affected employees.

ATTACHMENT E
AIR SAMPLING DATA SHEETS

SITE AIR MONITORING PROGRAM

Field Data Sheets

Location:

% LEL	% O_2	PID (units)	FID (units)	Aerosol Monitor (mg/m^3)	GM: Shield Probe/ Thin Window		NaI (uR/hr)	ZnS (cpm)
					mR/hr	cpm		
Monitox (ppm)				Detector Tube(s)				
Sound Levels (dBA)		Illumination	pH	Other	Other	Other	Other	Other

Location:

% LEL	% O_2	PID (units)	FID (units)	Aerosol Monitor (mg/m^3)	GM: Shield Probe/ Thin Window		NaI (uR/hr)	ZnS (cpm)
					mR/hr	cpm		
Monitox (ppm)				Detector Tube(s)				
Sound Levels (dBA)		Illumination	pH	Other	Other	Other	Other	Other

AIR MONITORING/SAMPLING DATA LOG

Client:	**W.O. No.:**	**Sample No.:**
Address:	**Sampled By:**	**Date:**

Employee and Location Information

Employee Name:	**Employee No.:**	**Job Title:**

Respirator ☐ APR ☐ ½ Mask ☐ Full Face ☐ PAPR ☐ ½ Mask ☐ Full Face ☐ Hood ☐ SAR ☐ ½ Mask ☐ Full Face ☐ Hood ☐ SCBA	**Manufacturer:**	**Cartridge Type:**

PPE: ☐ Hard Hat ☐ HPD ☐ Gloves ☐ Safety Shoes ☐ Coveralls ☐ Other:

Sampling Data

Sampling Type: ☐ Personal ☐ TWA ☐ STEL ☐ Area ☐ Source ☐ Full Shift ☐ Partial Shift ☐ Grab	**Media:**	**Pump Type/Serial No.:** /
Calibrator/Serial No.: /	**Pre-Calibration:** 1. 2. 3. avg-pre:	**Post-Calibration:** 1. 2. 3. avg-post:

Start Time:	**Restart Time:**	**Restart Time:**	**Avg. Flowrate:**	**% Change:**
1st Stop Time:	**2nd Stop Time:**	**3rd Stop Time:**	**Total Time:**	**Volume:**

Multiple Samples for this TWA: ☐ Yes ☐ No	**Multiple Chemical Exposures:** ☐ Yes ☐ No	**Exposure Time:** ☐ Normal ☐ Worst Case

Sampling Conditions

Weather Conditions:
Temp: R.H: B.P.: Other:

Engineering Controls:

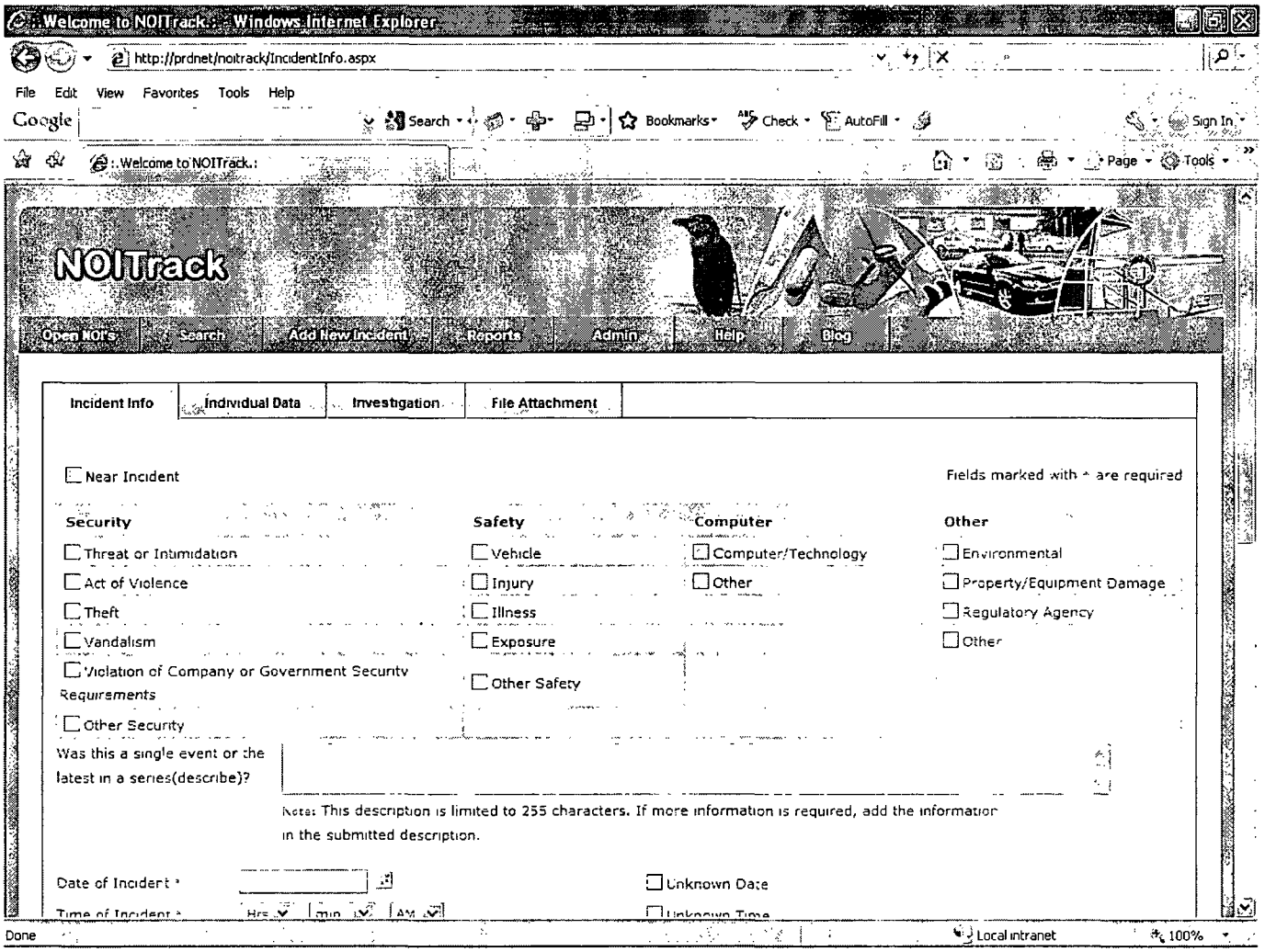
Substances Evaluated

Substance	Result	Substance	Result	Substance	Result

Observations and Comments

QA by: _____ **Date:** _____

ATTACHMENT F
INCIDENT REPORTING



Please go to NOITrack using the following link to complete incident reporting. If you are in the field and do not have access to NOITrack, please contact someone in your office to do the reporting for you.

http://prdnet/noitrack/IncidentInfo.aspx

Questions can be directed to Susan Hipp-Ludwick at 610.701.3046 or Matt Dillon at 610.701.3667

ATTACHMENT G
AHA CHECKLIST AND ENVIRONMENTAL COMPLIANCE

HAZARD CHECKLIST Site Manager/EHS Officer:
Date:
Location:
Address:

Task Team (name or reference via daily sign-in sheet)

HAZARDS IDENTIFIED (check those applicable)

	Chemical		Biological		Physical		Aerial lifts		Remote Areas
☐	Flammable/combustible	☐	Insects	☐	Noise	☐	Man. Material Handling	☐	Materials handling
☐	Corrosive	☐	Animals	☐	Heat	☐	Demolition	☐	High Pressure Washers
☐	Oxidizer	☐	Plants	☐	Cold	☐	Excavation	☐	Hand and Power Tools
☐	Reactive	☐	Mold/Fungus	☐	Inclement Weather	☐	Pile Driving	☐	Low Illumination
☐	Toxic	☐	Viral/Bacterial	☐	Hot Work	☐	Welding/Cutting/Burn	☐	Drilling & Boring
☐	Inhalation	☐	Density Gauges	☐	Confined Spaces	☐	Hot Surfaces	☐	Striking against/Struck-by
☐	Eyes/Skin	☐	Radiological	☐	Stored hazardous Energy	☐	Hot Materials	☐	Caught-in/Caught between
☐	Pesticides	☐	Ultra-Violet	☐	Elevation	☐	Rough Terrain	☐	Pushing/pulling
☐	Carcinogen	☐	Sunlight	☐	Utilities	☐	Compressed Gases	☐	Falls at same level
☐	Asbestos	☐	Infrared	☐	Machinery	☐	Hazardous Mat. Storage	☐	Falls from elevation
☐	Lead	☐	Lasers	☐	Mobile equipment	☐	Diving	☐	Repetitive motion
☐	UXO/OE/ CWM	☐	XRF	☐	Cranes	☐	Operation of Boats	☐	High (>110v) Electricity
☐	Process Safety	☐	Isotopes	☐	Manual Material Handling	☐	Working Over Water	☐	Slippery surface Ice/Snow
☐	Applying Paint/Coatings	☐		☐	Ladders	☐	Traffic	☐	
☐		☐		☐	Scaffolding	☐	Site Security	☐	

REQUIRED PROTECTION (check those applicable)

	Engineering Controls		Administrative Control		PPE				Contingency
☐	Guard Rails	☐	Qualified for task	☐	Air Supplying Respirator	☐	Tyvek coveralls	☐	Emergency Signal Known
☐	Machine Guards	☐	Trained/Certified	☐	Air Purifying Respirator	☐	Coated Coveralls	☐	Eye wash/shower Location
☐	Sound Barriers	☐	Hot Work Permit	☐	SCBA	☐	Welding leathers	☐	First Aid Kit Location
☐	Enclosure	☐	CSE Permit	☐	Hard Hat	☐	CWM	☐	Fire Extinguisher Location
☐	Elevation	☐	Lockout/Tag Out	☐	Ear Plugs	☐	Safety Shoes/Boots	☐	Spill Kit Location
☐	Isolation	☐	Work Permit	☐	Ear Muffs	☐	Rubber Boots	☐	Severe weather shelter
☐	GFCI	☐	Dig Safe Permit	☐	Safety Glasses	☐	Gloves	☐	Evacuation Routes
☐	Assured Ground Program	☐	Contingency Plan	☐	Goggles	☐	Cooling Suits		
☐	Apply Anti-slip/skid Mat	☐	Critical Lift Plans	☐	Chemical Goggles	☐	Ice Vests		
		☐	Equip. Inspection Sheets	☐	Face Shield	☐	Radiant heat Suits		
				☐	Thermal Shield	☐	Fall Arrest		
				☐	Welding Mask	☐	PFD		
				☐	Cutting Glasses	☐	Electrical insulation		

Any Modification to Tasks (list)	Other tasks or activities that may affect my activity	Reasons for any changes indicated above

Environmental Compliance Considerations:

☐	Generation of Hazardous Waste*	☐	→Waste Identification & Manifesting - Marking, Placarding, Labeling
☐	Generation of Investigation Derived Waste*	☐	→Training & Licensing for Use of Radioactive Materials/Sources
☐	Treatment, Storage, or Disposal of Hazardous Waste*	☐	→ Containers: dated, labeled, closed, full, stored less than 90 days
☐	Contingency to prevent or contain hazardous materials or oil spills or discharges to drains, body of water, soil*	☐	→ Risk of explosion or catastrophic release due to chemical storage or processing involving reactivity, flammables, solvents or explosives
☐	Disturbing of Asbestos Containing Materials (ACM)*	☐	→Training & Licensing for Asbestos Remediation Activities
☐	Application of Pesticides or Herbicides*	☐	
☐	Work on Above or Under-ground Storage Tanks*	☐	
☐	Transportation, Storage or Disposal of Radioactive Material*	☐	
☐	Activities producing or generating Air Emissions (or fugitive "fence-line" emissions) requiring either monitoring and/or permit*	☐	
☐	Excavations, Drilling, Probing or other activities that could impact underground utilities, pipelines, sewer or treatment systems.	☐	
☐	Shipment of Hazardous Waste off-site* Shipment of Samples in accordance with DOT/IATA	☐	

* Indicates need for an environmental compliance plan.

ATTACHMENT H
TRAFFIC CONTROL PLAN

Insert documents on following page.

ATTACHMENT I
AUDIT FORMS

Insert documents on following page.

ATTACHMENT J
ENVIRONMENTAL HEALTH & SAFETY INSPECTION CHECKLIST

ENVIRONMENTAL HEALTH AND SAFETY INSPECTION CHECKLIST

Project Name: _____

Inspector: _____

Submit to: _____

Date: _____

ENVIRONMENTAL HEALTH AND SAFETY INSPECTION CHECKLIST

THE WESTON SITE APPEARANCE

YES	NO		COMMENT
☐	☐	Is the site secured to prevent inadvertent, unnecessary, or unauthorized access? Are gates closed and locked at any time that the access point is not occupied or visible to site workers?	
☐	☐	Are access points posted with signs to indicate client and end-user client name, WESTON's name and logo, names of other contractors and sub-contractors, project name and location, and appropriate safety messages?	
☐	☐	Are required postings in place (e.g., Labor Poster, Emergency Phone Numbers, Site Map, etc.)?	
☐	☐	Are site trailers tied down per local code and provided with stairs that have a landing platform with guard and stair railings?	
☐	☐	Is a Site Safety file system established in the office to maintain records required by applicable safety regulations	
☐	☐	Is the Health and Safety Plan (HASP) or Accident Prevention Plan (APP) amended as scope of work changes, hazards are discovered or eliminated or if risk change?	
☐	☐	Is the Site Safety Plan and the Safety Officers Field Manual on site?	
☐	☐	Is new employee indoctrination provided?	
☐	☐	Have site Rules been provided, discussed and signed off on by all employees	
☐	☐	Incident Reporting procedure explained to all?	
☐	☐	Is site management trained in the WESTON (and client as applicable) Incident Reporting system?	
☐	☐	Are NOI and Supplemental Report forms and OSHA 300 Log available on site?	
☐	☐	Is Site Management aware of the Case Management and Incident Investigation Procedures?	
☐	☐	Is there a list of preferred provider medical facilities available?	
☐	☐	Has the "Inspection By A Regulatory Agency" procedure been reviewed by all site management?	
☐	☐	Will Competent Persons be required because of activities to be performed, equipment to be used or hazards to be encountered?	

POLICIES

YES	NO		COMMENT
☐	☐	Each individual employee is aware that he or she responsible for complying with applicable safety requirements, wearing prescribed safety equipment and preventing avoidable accidents.	
☐	☐	Do employees understand that they will wear clothing suitable for existing weather and work conditions and the minimum work uniform will include long pants, sleeved work shirts, protective footwear, hard hat, and safety glasses unless otherwise specified via the HASP.	
☐	☐	Are employees provided safety and health training to enable them to perform their work safely ? Is all training documented to indicate the date of the session, topics covered, and names of participants?	
☐	☐	Safety meetings are conducted daily. The purpose of the meetings are to review past activities, review pertinent tailgate safety topics and establish safe working procedures for anticipated hazards encountered during the day.	
☐	☐	Training has been provided to all personnel regarding handling of emergency situations that may arise from the activity or use of equipment on the project.	
☐	☐	Employees/contractors are informed and understand that they may not be under the influence of alcohol, narcotics, intoxicants or similar mind-altering substances at any time. Employees found under the influence of or consuming such substances will be immediately removed from the job site.	
☐	☐	Site workers and operators of any equipment or vehicles are able to read and understand the signs, signals and operating instructions of their use.	
☐	☐	Have contractors performing work provided copies of relevant documentation (such as medical fit-for-duty, training certificates, fit-tests, etc.) prior to initiation of the project?	

SANITATION
29 CFR 1926 Subparts C, D. EM 385-1-1, Section 2

YES	NO		COMMENT
☐	☐	Is an adequate supply of drinking water provided. Is potable/drinking water labeled as such? Are there sufficient drinking cups provided?	
☐	☐	Is there a sufficient number of toilets?	
☐	☐	Are washing facilities readily available and appropriate for the cleaning needs?	
☐	☐	Are washing facilities kept sanitary with adequate cleansing and drying materials?	
☐	☐	Waste is secured so as not to attract rodents, insects or other vermin?	
☐	☐	Is an effective housekeeping program established and implemented?	

ACCIDENT PREVENTION SIGNS, TAGS, LABELS, SIGNALS, AND PIPING SYSTEM IDENTIFICATION
29 CFR 1926 Subpart G. EM 385-1-1, Section 8

YES	NO		COMMENT
☐	☐	Are signs, tags, and labels provided to give adequate warning and caution of hazards and instruction/directions to workers and the public?	
☐	☐	Are all employees informed as to the meaning of the various signs, tags and labels used in the workplace and what special precautions are required?.	
☐	☐	Are construction areas posted with legible traffic signs at points of hazard?	
☐	☐	Are signs required to be seen at night lighted or reflectorized?	
☐	☐	Tags contain a signal word ("danger" or "caution") and a major message to indicate the specific hazardous condition or the instruction to be communicated to the employee. Tags follow requirements as outlined in 29 CFR 1926.200.	

MEDICAL SERVICES AND FIRST AID
29 CFR 1926 Subparts C, D. EM 385-1-1, Section 3

YES	NO		COMMENT
☐	☐	Is a local medical emergency facility (LMEF) identified in the HASP or APP?	
☐	☐	Has the LMEF been visited to verify the directions and establish contacts?	
☐	☐	Has site management reviewed WESTON's incident management procedures?	
☐	☐	Have clinics and specialists that will help WESTON manage injuries and illnesses been identified?	
☐	☐	Is there at least two (2) people certified in First Aid and CPR?	
☐	☐	Are first aid kits available at the command post and appropriate remote locations?	
☐	☐	Are first Aid Kits and Eyewash/Safety Showers inspected weekly?	
☐	☐	Are 15 minute eyewash/safety showers in place if required.	

FIRE PREVENTION AND PROTECTION
29 CFR 1926 Subpart F. EM 385-1-1, Section 9

YES	NO		COMMENT
☐	☐	Is an Emergency Response and Contingency Plan in place?	
☐	☐	Are emergency phone numbers posted?	
☐	☐	Are fire extinguishers selected and provided based on the types of materials and potential fire classes in each area.	
☐	☐	Are fire extinguishers provided in each administrative and storage trailer, within 50 ft but no closer than 25 ft of any fuel or flammable liquids storage, on welding and cutting equipment, on mechanical equipment?	
☐	☐	Are fire extinguishers checked daily and inspected monthly?	
☐	☐	Do site personnel know the location of fire extinguishers and how to use them?	
☐	☐	Are flammable and combustible liquids stored in approved containers?	
☐	☐	Safety cans are used for dispensing flammable or combustible liquids in 5 gallon or less volumes.	
☐	☐	Are flammable and combustible liquids stored in flammable storage cabinets or appropriate storage areas?	
☐	☐	Are flammable materials separated from oxidizers by at least 20 feet (or 5 foot tall, ½ -hour rated fire wall) when in storage?	
☐	☐	Are fuel storage tanks double walled or placed in a lined berm?	
☐	☐	Spills are cleaned up immediately and wastes are disposed of properly.	
☐	☐	Combustible scrap, debris and waste material (oily rags) are stored in closed metal containers and disposed of promptly.	
☐	☐	Vehicle fueling tanks are grounded and bonding between the tank and vehicle being fueled is provided?	
☐	☐	LPG is stored, handled and used according to OSHA regulations 29 CFR 1926.	
☐	☐	LPG cylinders are not stored indoors.	
☐	☐	Is a hot work permit program in place? See WESTON FLD-36	
☐	☐	Is smoking limited to specific areas, prohibited in flammable storage areas and are signs posted to this effect?	

HAZARDOUS SUBSTANCES, AGENTS AND ENVIRONMENTS
29 CFR 1926 Subparts D, Z. EM 385-1-1, Sections 6, 28

YES	NO		COMMENT
☐	☐	Are operations, materials and equipment evaluated to determine the presence of hazardous contaminants or if hazardous agents could be released in the work environment?	
☐	☐	Are MSDS for substances made available at the work-site when any hazardous substance is procured, used, or stored?.	
☐	☐	Are all containers and piping containing hazardous substances labeled appropriately?	
☐	☐	Is there an inventory of hazardous substances?	
☐	☐	Is there a site Specific Hazard Communication Program?	
☐	☐	Spill kits appropriate for the hazardous materials present are on site and their location is known to spill responders.	
☐	☐	Is disposal of excess hazardous chemicals performed according to WESTON's guidelines and RCRA regulations.	
☐	☐	Before initiation of activities where there is an identified asbestos or lead hazard, is there a written plan detailing compliance with OSHA and EPA asbestos or lead abatement requirements? Does the plan comply with state and local authority, and USACE requirements, as applicable?	
☐	☐	Are personnel trained and provided with protection against hazards from animals, poisonous plants and insects?	

PERSONAL PROTECTIVE AND SAFETY EQUIPMENT, RESPIRATORY AND FALL PROTECTION
29 CFR 1926 Subparts D, E, M. EM 385-1-1, Section 5

YES	NO		COMMENT
☐	☐	Do employees understand that the minimum PPE is hard hat, safety glasses with side shields and safety shoes or boots and that long pants and a sleeved shirt are required?	
☐	☐	Has the SSHC reviewed the PPE requirements in the HASP against actual site conditions and certified that the PPE is appropriate? (see Field Manual, PPE Program)	
☐	☐	PPE is inspected, tested and maintained in serviceable and sanitary condition as recommended by the manufacturer. Is defective or damaged equipment taken out of service and repaired or replaced?	
☐	☐	Are workers trained in the use of the PPE required?	
☐	☐	Are personnel exposed to vehicular or equipment traffic, including signal persons, spotters or inspectors required to vests or apparel marked with a reflective or high visibility material?	
☐	☐	Is there a noise hazard? If yes, hearing protection will be required.	
☐	☐	Is there a splash or splatter hazard? Face shields or goggles will be required.	
☐	☐	Will personnel be working in or over water? Personnel Floatation devices will be required.	
☐	☐	Is there a welding hazard? Welding helmet and leathers will be required. Is there a cutting torch hazard? Goggles and protective clothing will be required.	
☐	☐	Is each person on a walking/working surface with an unprotected side or edge which is 6 feet (1.8 m) or more above a lower level protected from falling by the use of guardrail systems, safety net systems or personal fall arrest systems? See WESTON FLD 25 (Note General Industry standard is four feet).	
☐	☐	Guardrail systems are used as primary protection whenever feasible. Guardrail construction meets criteria in 29 CFR 1926.502(b).	
☐	☐	Personal fall arrest systems (PFAS) are inspected and appropriate for use.	
☐	☐	Ropes and straps (webbing) used in lanyards, lifelines, and strength components of body belts and body harnesses are from synthetic fibers.	
☐	☐	Safety nets and safety net installations are constructed, tested and used according to 29 CFR 1926.502.c	
☐	☐	Is respirator use required? See WESTON Respiratory Protection Program	
☐	☐	Persons using respiratory protection have been successfully medically cleared, trained and fit tested.	
☐	☐	Respirators are used according to the manufacturer's instructions, regulatory requirements, selection criteria and health and safety plan provisions.	
☐	☐	For Level C operations with organic vapor contamination, is the cartridge change-out schedule documented?	
☐	☐	Is breathing certified as Grade D, or better, and certification available on-site?	

ENVIRONMENTAL HEALTH AND SAFETY INSPECTION CHECKLIST

MACHINERY AND MECHANIZED EQUIPMENT
29 CFR 1926 Subparts N, O. EM 385-1-1, Sections 16, 17, 18

YES	NO		COMMENT
☐	☐	Are inspections of machinery by a competent person established?	
☐	☐	Is equipment inspected daily before its next use?	
☐	☐	Equipment inspection reports are reviewed, followed-up on negative findings and records of inspections are maintained?	
☐	☐	Machinery or equipment found to be unsafe is taken out of service until the unsafe condition has been corrected.	
☐	☐	Is there a preventive maintenance program established?	
☐	☐	Are operators of equipment qualified and authorized to operate?	
☐	☐	Is all self-propelled construction and industrial equipment equipped with a reverse signal alarm?	
☐	☐	Are seats or equal protection provided for each person required to ride on equipment. Are seatbelts installed and worn on motor vehicles, as appropriate.	
☐	☐	All equipment with windshields is equipped with powered wipers. If fogging or frosting is possible, operable defogging or defrosting devices are required.	
☐	☐	Internal combustion engines are not operated in enclosed areas unless adequate ventilation are made. Air monitoring is conducted to assure safe working conditions.	
☐	☐	Is each bulldozer, scraper, dragline, crane, motor grader, front-end loader, mechanical shovel, backhoe, or similar equipment equipped with at least one dry chemical or carbon dioxide fire extinguisher with a minimum rating of 5-B:C?	
☐	☐	Will cranes or other lifting devices be used? If so, are the following documents available on site: 1) a copy of the operating manual, 2) load rating chart, 3) log book, 4) a copy of the last annual inspection and 5) the initial on-site inspection?	
☐	☐	Do operators have certificates of training to operate the type of crane(s) to be used?	
☐	☐	Is a signal person provided when the point of operation is not in full view of the vehicle, machine or equipment operator? When manual (hand) signals are used, is only one person designated to give signals to the operator?	
☐	☐	Signal persons back one vehicle at a time. While under the control of a signal person, drivers do not back or maneuver until directed. Drivers stop if contact with the signal person is lost.	
☐	☐	Is a critical lift plan prepared by a competent person whenever: a lift is not routine, or a lift exceeds 75% of a crane's capacity, a lift results in the load being out of the operator's line of sight, or a lift involves more than one crane, a man basket is used, or the operator believes there is a need for a critical lift plan.	
☐	☐	Fork Lifts (Powered Industrial Trucks) - Will forklifts be used on site?	
☐	☐	All fork lifts meet the requirements of design, construction, stability, inspection, testing, maintenance and operation as indicated in ANSI/ASME B56.1 Safety Standards for Low Lift and High Lift Trucks.	
☐	☐	Do forklift operators have certificates of training?	
☐	☐	Are pile driving operations conducted according to EM 385-1-1, Section 16.L?	
☐	☐	Is drilling equipment operated, inspected, and maintained as specified in the manufacturer's operating manual? Is a copy of the manual available at the work-site? See also the Drilling Safety Guide in the Safety Officers Field Manual.	
☐	☐	Are flag persons provided when operations or equipment on or near a highway expose workers to traffic hazards? Do flag persons and persons working in proximity to a road wear high visibility vests? Are persons exposed to highway vehicle traffic protected by signs in all directions warning of the presence of the flag persons and the work? Do signs and distances from the work zone conform to federal and local regulations?	

MOTOR VEHICLES
29 CFR 1926 Subpart O. EM 385-1-1, Section 18

YES	NO		COMMENT
☐	☐	Motor vehicle operators have a valid permit, license, or certification of ability for the equipment being operated.	
☐	☐	Inspection, maintenance and repair is according to manufacturer's requirements by qualified persons.	
☐	☐	Vehicles are inspected on a scheduled maintenance program.	
☐	☐	Vehicles not in safe operating condition are removed from service until defects are corrected.	
☐	☐	Glass in windshields, windows, and doors is safety glass. Any cracked or broken glass is replaced.	
☐	☐	Seatbelts are installed and worn.	
☐	☐	The number of passengers in passenger-type vehicles does not exceed the number which can be seated.	
☐	☐	Trucks used to transport personnel have securely anchored seating, a rear endgate, and a guardrail.	
☐	☐	No person is permitted to ride with arms or legs outside of a vehicle body; in a standing position on the body; on running boards; seated on side fenders, cabs, cab shields, rear of the truck or on the load.	
☐	☐	ATV operators possess valid state drivers license, have completed an ATV training course prior to operation of the vehicle, and wear appropriate protective equipment such as helmets, boots, and gloves.	

EXCAVATING AND TRENCHING
29 CFR 1926 Subpart P. EM 385-1-1, Section 25

YES	NO		COMMENT
☐	☐	Has the known or estimated location of utility installations such as sewer, telephone, fuel, electric, water lines, or any other underground installations that may be expected to be encountered during excavation been determined before excavation? Have utility locations been verified by designated state services according to state regulations? Has the client provided clearance where state jurisdiction doesn't apply?	
☐	☐	Have overhead utilities in excavation areas been identified and either de-energized, shielded or barricaded so excavating equipment will not come within 10 feet?	
☐	☐	Are inspections of the excavation, the adjacent areas, and protective systems made daily and as necessary by a competent person?	
☐	☐	Are Protective systems in place as prescribed by the competent person?	
☐	☐	Is material removed from excavations managed so it will not overwhelm the protective systems?	
☐	☐	Are barriers provided between excavations and walkways?	
☐	☐	Are excavations by roadways barricaded to warn vehicles of presence or to prevent them from falling in?	
☐	☐	Is there a means of exit from the excavation every 25 feet?	
☐	☐	Is air monitoring required? If yes, Is it performed?	

CONFINED SPACES
29 CFR 1910 Subpart J. EM 385-1-1, Section 6

YES	NO		COMMENT
☐	☐	Is there a Confined Space Entry Program in place?	
☐	☐	Are the confined Spaces identified and labeled?	
☐	☐	Will the Confined Spaces be entered?	
☐	☐	Is appropriate entry documentation used and on-file?	

ENVIRONMENTAL HEALTH AND SAFETY INSPECTION CHECKLIST

ELECTRICAL
29 CFR 1926 Subpart K. EM 385-1-1, Section 11

YES	NO		COMMENT
☐	☐	Are electrical installations made according to the National Electrical Code and applicable local codes?	
☐	☐	Qualified electricians make all connections and perform all work within 10 feet of live electric equipment.	
☐	☐	Location of underground, overhead, under floor, behind wall electrical lines is known and communicated. Lines are documented by qualified person as de-energized where necessary.	
☐	☐	Workers understand they must not work near live parts of electric circuits, unless they are qualified as required by OSHA or are protected by de-energizing and grounding the parts, guarding the parts by insulation, or other effective means?	
☐	☐	Employees who regularly work on or around energized electrical equipment or lines are instructed in the cardiopulmonary resuscitation (CPR) methods.	
☐	☐	Workers are prohibited from working alone on energized lines or equipment over 600 volts.	
☐	☐	Are Ground-fault circuit interrupters (GFCI's) or is ground fault circuit protection provided to protect employees from ground-fault hazards for all 115 – 120 Volt, 15 and 20 amp receptacle outlets which are not a part of the permanent wiring of a building or structure at construction sites?	
☐	☐	Circuit breakers are labeled.	
☐	☐	Circuit breaker and all cabinets with exposed electric conductors are kept tightly closed.	
☐	☐	Unused openings (including conduit knockouts) in electrical enclosures and fittings are closed with appropriate covers, plugs or plates.	
☐	☐	Sufficient access and working space is provided and maintained about all electrical equipment to permit ready and safe operations and maintenance.	
☐	☐	Motors are located within sight of their controllers or controller disconnecting means are capable of being locked in the pen position or is a separate disconnecting means installed in the circuit within sight of the motor.	
☐	☐	Are visual inspections of extension cords and cord-and plug-connected equipment conducted daily? Is equipment found damaged or defective tagged and removed from service, and not used until repaired?	
☐	☐	Wet Areas - Is portable lighting used in wet or conductive locations, such as tanks or boilers operated at no more than 12 volts and protected by GFCIs.	
☐	☐	Are electrical installations in hazardous areas to NEC?	
☐	☐	Metal ladders and tools including tape measures or fabric with metal thread are prohibited where contact with energized electrically parts is possible.	
☐	☐	All extension cords are the three-wire type, designed and rated for hard or extra hard usage?	
☐	☐	Worn or frayed electrical cords or cables are taken out of service. Fastening with staples, hanging from nails or suspending extension cords by wire is prohibited.	
☐	☐	Electric wire/flexible cord passing through work areas is protected from damage such as foot traffic, vehicles, sharp corners, projections and pinching? Flexible cords and cables passing through holes are protected by bushings or fittings?	
☐	☐	Before an employee or contractor performs any service or maintenance on a system where the unexpected energizing, start up, or release of kinetic or stored energy could occur and cause injury or damage, the system is to be isolated. Only authorized persons may apply and remove lockouts and tags.	
☐	☐	Contractors planning to use hazardous energy control procedures submit their hazardous energy control plan to the WESTON site safety officer or designee before implementing lockout/tagout procedures.	
☐	☐	There is a site specific hazardous energy control plan that clearly and specifically outlines the scope, purpose, authorization, rules and techniques to be used for the control of hazardous energy.	
☐	☐	Workers possess the knowledge and skills required for the safe application, usage and removal of energy controls.	

WELDING AND CUTTING
29 CFR 1926 Subpart J. EM 385-1-1, Section 10

YES	NO		COMMENT
☐	☐	Prior to performing welding, cutting or any other heat or spark producing activity, an assessment of the area is made by a competent person to identify combustible materials and potential sources of flammable atmospheres.	
☐	☐	Welders, cutters and their supervisors are trained in the safe operation of their equipment, safe welding and cutting practices, hot work permit requirements, and fire protection.	
☐	☐	Welding and cutting equipment is inspected daily before use. Unsafe equipment is taken out of use, replaced or repaired.	
☐	☐	Workers and the public is shielded from welding rays, flashes, sparks, molten metal and slag.	
☐	☐	Employees performing welding, cutting or heating are protected by PPE appropriate for the hazards (e.g., respiratory, vision and skin protection).	
☐	☐	Compatible fire extinguishing equipment is provided in the immediate vicinity of welding or cutting operations.	
☐	☐	Drums, tanks, or other containers and equipment which have contained hazardous materials shall be thoroughly cleaned before welding or cutting. Cleaning shall be performed in accordance with NFPA 327, Cleaning or Safeguarding Small Tanks and Containers, ANSI/AWS F4.1, Recommended Safe Practices for the Preparation for Welding and Cutting of Containers That Have Held Hazardous Substances, and applicable health and safety plan requirements.	

HAND AND POWER TOOL SAFETY
29 CFR 1926 Subpart I. EM 385-1-1, Section 13

YES	NO		COMMENT
☐	☐	Power tools are from a manufacturer listed by a nationally recognized testing laboratory for the specific application for which they are to be used.	
☐	☐	Hand & power tools are inspected, maintained, tested and determined to be in safe operating condition before use.	
☐	☐	Tools found to be unsafe are not used, tagged and repaired or destroyed.	
☐	☐	Users of tools are trained in safe use.	
☐	☐	Electrical tools have cords and plug connections in good repair.	
☐	☐	Electrical tools are effectively grounded or approved double insulated.	
☐	☐	Reciprocating, rotating, and moving parts of equipment are guarded if they may be accessed by employees or they otherwise create a hazard.	
☐	☐	Safety clips/retainers are installed and maintained on pneumatic impact tool connections.	
☐	☐	Chain saws have an automatic chain brake or anti-kickback device.	
☐	☐	Pneumatic and hydraulic hoses and fittings are inspected regularly.	
☐	☐	Employees who operate powder actuated tools are trained and carry valid operators cards.	
☐	☐	Powder activated tools are stored in individual locked containers, when not in use and are not loaded until ready to use.	
☐	☐	Powder actuated tools are inspected for obstructions or defects daily before use.	
☐	☐	Powder actuated tool operators have appropriate PPE.	

RIGGING
29 CFR 1926 Subpart H. EM 385-1-1, Section 15

YES	NO		COMMENT
☐	☐	Rigging equipment is inspected as specified by the manufacturer, by a qualified person, before use on each shift and as necessary to assure that it is safe.	
☐	☐	Defective equipment is removed from service.	
☐	☐	Rigging not in use is removed from the work area, properly stored, and maintained in good condition.	
☐	☐	Wire rope removed from service for defects is cut up or plainly marked as unfit for use as rigging.	
☐	☐	The number of saddle clips used to form eyes in wire rope conforms with Table H-20, are spaced evenly and the saddles are on the live side.	
☐	☐	Chain rigging has a tag clearly indicating load limits, is inspected before initial use, then weekly, and is of alloyed metal.	
☐	☐	Fiber rope rigging is not used if it is frozen or has been subject to acids or excessive heat.	
☐	☐	Slings and their fittings and fastenings are inspected before use on each shift and as needed during use.	
☐	☐	Drums, sheaves, and pulleys on rigging hardware are smooth and free of surface defects that can damage rigging.	

MATERIAL HANDLING, STORAGE, AND DISPOSAL
29 CFR 1926 Subpart H. EM 385-1-1, Section 14

YES	NO		COMMENT
☐	☐	Employees are trained in and use safe lifting techniques.	
☐	☐	Materials are not moved or suspended over workers unless positive precautions have been taken to protect workers.	
☐	☐	Conveyors are constructed, inspected, & maintained by qualified persons according to manufacturer's recommendations.	
☐	☐	All conveyors are to be equipped with emergency stopping devices.	
☐	☐	Hazardous exposed moving machine parts are guarded mechanically, electrically or by location.	
☐	☐	Controls are clearly marked and/or labeled to indicate the function controlled.	
☐	☐	Taglines are used for suspended loads where the movement may be hazardous to persons.	
☐	☐	Material in storage is protected from falling or collapse by effective stacking, blocking, cribbing, etc.	
☐	☐	Walkways and aisles are to be kept clear.	
☐	☐	Materials are not stored on scaffolds or runways in excess of normal placement or in excess of safe load limits.	
☐	☐	Work areas and means of access are maintained safe and orderly.	
☐	☐	Tools, materials, extension cords, hoses or debris do not cause tripping or other hazards.	
☐	☐	Storage and construction sites are kept free from the accumulation of combustible materials.	
☐	☐	Waste materials and rubbish are placed in containers or, if appropriate, in piles. Waste materials are disposed of in accord with applicable local, state, or federal requirements.	

FLOATING PLANT AND MARINE ACTIVITIES
29 CFR 1926 Subpart O. EM 385-1-1 Section 19

YES	NO		COMMENT
☐	☐	Floating plants that are regulated by the USCG have current inspections and certificates.	
☐	☐	Before any floating plant is brought to the job site and placed in service it is inspected and determined to be in safe operating condition	
☐	☐	Periodic inspections are made such that safe operating conditions are maintained. Strict compliance with EM 385-1-1, Section 19 is expected.	
☐	☐	Plans are in place for removing or securing the plant and evacuation of personnel endangered by severe weather and other marine emergencies such as; fire, flooding, man overboard, hazardous materials incidents, etc..	
☐	☐	Means of access are properly secured, guarded, and maintained free of slipping and tripping hazards.	
☐	☐	Dredging operations follow guidelines as established in EM 385-1-1, Section 19.D.	

PRESSURIZED EQUIPMENT AND SYSTEMS
29 CFR 1926 Subparts I, F. EM 385-1-1, Section 20

YES	NO		COMMENT
☐	☐	Pressurized equipment and systems are inspected before being placed into service.	
☐	☐	Pressurized equipment or systems found to be unsafe are tagged "Out of Service-Do Not Use".	
☐	☐	Systems and equipment are operated, inspected and maintained by qualified, designated personnel.	
☐	☐	Safe clearance, lockout/tagout procedures are followed as appropriate during maintenance or repair.	
☐	☐	Air hose, pipes, fittings are pressure-rated for the activity. Defective hoses are removed from service.	
☐	☐	Hoses aren't laid over ladders, steps, scaffolds, or walkways in a manner that creates a tripping hazard.	
☐	☐	The use of compressed air for personal cleaning is prohibited. The use of compressed air for other cleaning is restricted to less than 30 psig.	
☐	☐	Compressed gas cylinders are stored in well-ventilated locations.	
☐	☐	Cylinders in storage are separated from flammable or combustible liquids and from easily ignitable materials by at least 40 feet or by a minimum five feet tall, ½ -hour fire resistive partition.	
☐	☐	Stored cylinders containing oxidizing gases are separated from fuel gas cylinders by at least 20 feet or by a minimum five feet tall, ½ -hour fire resistive partition.	
☐	☐	Cylinder valve caps are in place when cylinders are in storage, in transit, or a regulator is not in place.	
☐	☐	Compressed gas cylinders in service are secured in substantial fixed or portable racks or hand trucks.	
☐	☐	Oxygen cylinders and fittings are kept away from, and free from oil and grease.	
☐	☐	Cylinder Storage areas are posted with the names of the gases in storage and with signs indicating "No Smoking or Open Flame".	
☐	☐	Cylinders are to be stored such that mechanical and corriosion damage is avoided. Cylinders are not to be stored in areas required as an egress path.	
☐	☐	Cylinders may be stored in the open outdoors, however, they must be protected from the ground to prevent corrosion and must be protected from temperatures that may exceed 125 degrees F.	

WORK PLATFORMS/SCAFFOLDS
29 CFR 1926 Subparts L, M, N. EM 385-1-1 Sections 21, 22

YES	NO		COMMENT
☐	☐	Work platforms are erected, used, inspected, tested, maintained and repaired according to manufacturer's requirements.	
☐	☐	Construction, inspection, and disassembly of scaffolds is under the direction of a competent person.	
☐	☐	Workers on scaffolding have been trained by a qualified person.	
☐	☐	Scaffolds are erected on a firm and level surface and are square and plumb.	
☐	☐	Scaffolds are not loaded in excess of rated capacity.	
☐	☐	Working levels of work platforms are fully planked or decked.	
☐	☐	Planks are in good condition and free from obvious defects.	
☐	☐	Fabricated frame scaffolding four times higher than the base width is secured to building/structure according to manufacturer's instruction and/or OSHA requirements.	
☐	☐	Working platforms of scaffolding over ten feet in height have guard rails meeting OSHA specifications. Fall protection is suggested at four feet or greater.	
☐	☐	Scaffolding/work platforms are accessed by means of a properly secured ladder or equivalent. Built on ladders conform to scaffold ladder requirements. Climbing of braces is not allowed.	
☐	☐	Crane supported work platforms are designed and used in accordance with OSHA standards.	
☐	☐	Elevating work platforms are operated, inspected and maintained according to the equipment operations manual.	
☐	☐	Employees working in aerial lifts remain firmly on the floor of the basket. Employees use fall protection while in an aerial lift basket.	

WALKING AND WORKING SURFACES AND STAIRS
29 CFR 1926 Subparts L, M, X. EM 385-1-1, Sections 21, 22, 24

YES	NO		COMMENT
☐	☐	Work areas are clean, sanitary, and orderly	
☐	☐	Work surfaces are kept dry or appropriate means are taken to assure the surfaces are slip-resistant	
☐	☐	Accumulations of combustible dust are routinely removed.	
☐	☐	Aisles and passageways are kept clear and marked as appropriate.	
☐	☐	There is safe clearance for walking in aisles where motorized or mechanical handling equipment is operating.	
☐	☐	Materials or equipment is stored in such a way that sharp projections will not interfere with the walkway.	
☐	☐	Changes of direction or elevation are readily identifiable.	
☐	☐	Aisles or walkways that pass near moving or operating machinery, welding operations or similar operations are arranged so employees will not be subjected to potential hazards.	
☐	☐	Standard guardrails are provided wherever aisle or walkway surfaces are elevated more than 30 inches above any adjacent floor or the ground and bridges provided where workers must cross over conveyors and similar hazards.	
☐	☐	There are standard stair rails or handrails on all stairways having four or more risers or with an elevation of 30 or more inches.	
☐	☐	Stairways are at least 22 inches wide. (General Industry Standard)	
☐	☐	Stairs angle no more than 50 and no less than 30 degrees, risers are uniform from top to bottom (plus or minus 1/4 inch) and are provided with a surface that renders them slip resistant.	
☐	☐	Stairway handrails are not less than 36 inches above the leading edge of stair treads and have at least 3 inches of clearance between the handrails and the wall or surface they are mounted on.	
☐	☐	Where doors or gates open directly on a stairway, there is a platform provided so the swing of the door does not reduce the width of the platform to less than 20 inches.	

☐	☐	Where stairs or stairways exit directly into any area where vehicles may be operated, there are adequate barriers and warnings provided to prevent employees stepping into the path of traffic.	
☐	☐	Signs are posted showing the load capacity of elevated storage areas.	
☐	☐	An appropriate means of access and egress is provided for surfaces with 19 or more inches of elevation change.	
		Material on elevated surfaces is minimized, with that necessary for immediate work requriements piled, stacked or racked in a manner to prevent it from tipping, falling, collapsing, rolling or spreading.	

FLOOR AND WALL HOLES AND OPENINGS
29 CFR 1926 Subpart M. EM 385-1-1, Section 24

YES	NO		COMMENT
☐	☐	Floor and roof openings that persons can walk into or fall through are guarded by a physical barrier or covered.	
☐	☐	Holes (defined as equal to or greater than 2 inches in least dimension) where person could trip must be covered/protected.	
☐	☐	Unprotected sides and edges on a walking/working surface six feet or more (note four feet in General Industry) are protected by guardrail system, safety net or Personal Fall Arrest System (PFAS).	
☐	☐	Unused portions of service pits and pits not actually in use are either covered or protected by guardrails or equivalent.	
☐	☐	Coverings for holes or other openings must be constructed of sufficient strength to support any anticipated load, must be secured in place to prevent accidental removal or displacement and must be marked indicating purpose (e.g., stenciled "Hole" or painted contrasting color to surroundings).	

LADDERS
29 CFR 1926 Subpart X. EM 385-1-1, Section 21

YES	NO		COMMENT
☐	☐	Portable ladders are used for their designed purpose only.	
☐	☐	Portable ladders are examined for defects prior to, and after use.	
☐	☐	Ladders found to be defective are clearly tagged to indicate "DO NOT USE" if repairable, or destroyed immediately if no repair is possible.	
☐	☐	Workers are trained in hazards associated with ladder use and how to inspect ladders.	
☐	☐	Ladders have secure footing provided by a combination of safety feet, top of ladder tie-offs and mud cills or a person holding the ladder to prevent slipping.	
☐	☐	The handrails of a straight ladder used to get from one level to another extend at least 36 inches above the landing.	
☐	☐	Ladders conform to construction criteria of ANSI Standards A-14.1 and A-14.2.	
☐	☐	Wooden ladders are not painted with an opaque covering such that signs of flaws, cracks or drying are obscured.	
☐	☐	Fixed ladders are constructed and used according to OSHA Standards, 29 CFR 1910.27 and ANSI A-14.3.	
☐	☐	Rungs, cleats or steps, and side rails that may be used for handholds when climbing, offer adequate gripping surface and are free of splinters, slivers or burrs, and substances that could cause slipping.	
☐	☐	Fixed ladders of greater than 24 feet have cages or other approved fall protection devices. (note General Industry is 20 feet).	
☐	☐	Where fall protection is provided by ladder safety systems (body belts or harnesses, lanyards and braking devices with safety lines or rails), systems meet the requirements of and are used in accordance with WESTON Fall Protection Standard Practices and are compatible with construction of the ladder system.	

DEMOLITION
29 CFR 1926 Subpart T. EM 385-1-1, Section 23

YES	NO		COMMENT
☐	☐	Prior to initiating demolition activities an engineering survey (by a competent person) and a demolition plan (by a competent person) is completed.	
☐	☐	All employees engaged in demolition activities are instructed in the demolition plan.	
☐	☐	It has been determined through the engineering survey and outlined in the plan, if any hazardous materials, or conditions (e.g., asbestos, lead, utility connections, etc.) exist. Such hazards are controlled or eliminated before demolition is started.	
☐	☐	Continued inspections, by a competent person, are conducted to ensure safe employee working conditions.	

TREE MAINTENANCE AND REMOVAL
29 CFR 1910 Subpart R. EM 385-1-1, Section 31

YES	NO		COMMENT
☐	☐	Tree maintenance or removal is done is under the direction of a qualified person.	
☐	☐	Tree work, in the vicinity of charged electric lines, is by trained persons qualified to work with electricity and tree work. Appropriate distances are maintained for all workers who are not qualified.	
☐	☐	Equipment is inspected, maintained, repaired and used in accordance with the manufacture's directions.	
☐	☐	Prior to felling actions are planned to include clearing of the area to permit safe working conditions and escape.	
☐	☐	Employees must be trained in the safe operation of all equipment.	
☐	☐	All equipment and machinery is inspected and determined safe prior to use.	
☐	☐	Work is performed under requirements of FLD 43.	

BLASTING
29 CFR 1926 Subpart U. EM 385-1-1, Section 29

YES	NO		COMMENT
☐	☐	A blasting safety plan is developed prior to bringing explosives on-site.	
☐	☐	The transportation, handling, storage, and use of explosives, blasting agents, and blasting equipment must be directed and supervised by a person with proven experience and ability in blasting operations. Licensing of person is verified.	
☐	☐	Blasting operations in or adjacent to cofferdams, piers, underwater structures, buildings, structures, or other facilities must be carefully planned with full consideration to potential vibration and damage.	

HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE AND UNDERGROUND STORAGE TANK (UST) ACTIVITIES
29 CFR 1926 Subpart D. EM 385-1-1, Section 28

YES	NO		COMMENT
☐	☐	All construction activities performed with known or potential exposure to hazardous waste are conducted in accordance with Hazardous Waste Operations and Emergency Response requirements.	

CONCRETE and MASONRY CONSTRUCTION
29 CFR 1926 Subpart Q. EM 385-1-1, Section 27

YES	NO		COMMENT
☐	☐	Construction loads are not placed on a concrete or masonry structure or portion of a concrete or masonry structure unless the employer determines, based on information from a person who is qualified in structural design, that the structure or portion of the structure is capable of supporting the loads.	
☐	☐	Employees are not permitted to work above or in positions exposed to protruding reinforcing steel or other impalement hazards unless provisions have been made to control the hazard.	
☐	☐	Sections of concrete conveyances and airlines under pressure are secured with wire rope (or equivalent material) in addition to the regular couplings or connections.	
☐	☐	Structural and reinforcing steel for walls, piers, columns, and similar vertical structures is supported and/or guyed to prevent overturning or collapse	
☐	☐	All form-work, shoring, and bracing is designed, fabricated, erected, supported, braced, and maintained so it will safely support all vertical and lateral loads that may be applied until the loads can be supported by the structure.	
☐	☐	Shoring equipment is inspected prior to erection to determine that it is specified in the shoring design. Any equipment found to be damaged is not used.	
☐	☐	Erected shoring equipment is inspected immediately prior to, during, and immediately after the placement of concrete. Any shoring equipment that is found to be damaged, displaced, or weakened is immediately reinforced or re-shored.	
☐	☐	Shoring, vertical slip forms and jacks conform with requirements of Section 27.B.08-13 of USACE EM 385-1-1.	
☐	☐	Forms and shores (except those on slab or grade and slip forms) are not removed until the individual responsible for forming and/or shoring determines that the concrete has gained sufficient strength to support its weight and all superimposed loads.	
☐	☐	Precast concrete members are adequately supported to prevent overturning or collapse until permanent connections are complete	
☐	☐	No one is permitted under pre-cast concrete members being lifted or tilted into position except employees required for the erection of those members.	
☐	☐	Lift slab operations are planned and designed by a registered engineer or architect.	
☐	☐	Hydraulic jacks used in lift slab construction have a safety device that causes the jacks to support the load in any position if the jack malfunctions	
☐	☐	No one is permitted under the slab during jacking operations.	
☐	☐	A limited access zone is established whenever a masonry wall is being constructed.	
☐	☐	Fall protection is provided to masonry workers exposed to falls of 6 feet or more.	

STEEL ERECTION
29 CFR 1926 Subpart R. EM 385-1-1, Section 27

YES	NO		COMMENT
☐	☐	Impact wrenches have a locking device for retaining the socket. Containers shall be provided for storing or carrying rivets, bolts, and drift pins, and secured against accidental displacement when aloft.	
☐	☐	Structural and reinforcing steel for walls, piers, columns, and similar vertical structures shall be guyed and supported to prevent collapse	
☐	☐	No loading is placed upon steel joists until all bridging is completely and permanently installed.	
☐	☐	Workers are provided fall protection whenever they are exposed to falls of 1.8 m (6 ft) or more (EM 385-1-1).	
☐	☐	Temporary flooring in skeleton steel erection conforms with Section 27.F of USACE 385-1-1	

ROOFING
29 CFR 1926 Subpart M. EM 385-1-1, Sections 21, 22, 24, 27

Yes	No		Comments
☐	☐	In the construction, maintenance, repair, and demolition, of roofs, fall protection systems is provided that will prevent personnel from slipping and falling from the roof and prevent personnel on lower levels from being struck by falling objects	
☐	☐	On all roofs greater than 4.8 m (16 ft) in height, a hoisting device, stairways, or progressive platforms are furnished for supplying materials and equipment.	
☐	☐	Roofing materials and accessories that could be moved by the wind, including metal roofing panels, that are on the roof and unattached are secured when wind speeds are greater than, or are anticipated to exceed, 10 mph.	
☐	☐	Level, guarded platforms are provided at the landing area on the roof.	
☐	☐	When their use is permitted, warning line systems comply with USACE Section 27.07 of EM 385-1-1.	
☐	☐	Workers involved in roof-edge materials handling or working in a storage area located on a roof with a slope -/= to four vertical to twelve horizontal and with edges 6 ft or more above lower levels are protected by the use of a guardrail, safety net, or personal fall arrest system along all unprotected roof sides and edges of the area.	

ENVIRONMENTAL COMPLIANCE

Yes	No		C
☐	☐	Environmental Compliance and Waste Management Plan on file.	
☐	☐	Waste Determination Made.	
☐	☐	Manifest and/or Shipping Papers prepared and filed.	
☐	☐	Manifest Exception Reports Prepared, as necessary. Procedures to track manifests in place.	
☐	☐	State Annual and EPA Biennial Reporting Information Available.	
☐	☐	RCRA Personnel Training Records on file.	
☐	☐	CAA Permits on file.	
☐	☐	CWA Permits on file.	
☐	☐	RCRA Permits on file.	
☐	☐	State and/or Local Permits on file.	
☐	☐	RCRA Inspections conducted and Documentation on file.	
☐	☐	Transporter and TSD compliance information on file.	
☐	☐	Waste Accumulation Areas Managed Properly.	
☐	☐	Wetlands Areas Identified and Protected.	
☐	☐	Endangered, Threatened or Special Concern Species or Areas Identified and Protective Methods Determined.	
☐	☐	Runon and Runoff Concerns Identified and Managed.	
☐	☐	Adjacent Land Areas Protected as Necessary.	
☐	☐	Non-Hazardous Solid Wastes Managed Properly.	

MISCELLANEOUS REGULATORY and POLICY COMPLIANCE

Yes	No		C
☐	☐	Personnel Training Records for DOT Materials Handling on file.	
☐	☐	Noise Control Issues Addressed and Managed.	
☐	☐	Site Security Issues Identified and Managed.	
☐	☐	Known Historical, Archeological and Cultural Resources Identified and Managed.	
☐	☐	WESTON EHS Analysis Checklist In Use.	
☐	☐	Safety Observation and Recognition Program in place.	
☐	☐	Weekly EHS Report Card System in place.	
☐	☐	Federal, State and Local Required Postings in place.	
☐	☐	Site specific Lockout/Tagout Program is in place.	
☐	☐	Site-specific Confined Space Program is in place.	
☐	☐	Site Safety Officer filing system is in place and up to date.	

ATTACHMENT K
ENVIRONMENTAL PROTECTION AND SUSTAINABILITY PROGRAM IMPACT CHECKLIST

ENVIRONMENTAL PROTECTION AND SUSTAINABILITY PROGRAM IMPACT CHECKLIST

PRE-PROPOSAL and EHS COMPLIANCE PLANNING

1. BACKGROUND

a. Client name, address, phone number, and Point of Contact:

b. Name/Identifier of proposal, if applicable:

c. Prepared by:

2. DESCRIPTION

a. Description, justification for, and location of Scope of Work in the proposal (i.e. training, activity, construction, regulation, license; include site location map):

b. Environmental setting and present land use of the proposed site:

3. KNOWN OR POTENTIAL EHS IMPACTS:

Note that this checklist cannot completely anticipate all regulatory requirements, and that use of this checklist outlines only certain Federal criteria of specific interest (it is by no means a complete listing). State and local requirements must be evaluated also.

- The **Project Manager and Project Team** are responsible for evaluating project-specific environmental, health and safety needs that may be beyond those outlined in this checklist.
- Assistance is available through the Division Environmental, Health, and Safety (EHS) Managers and Corporate EHS Department. Early engagement of EHS support is a key to success.
- "**Yes**" responses will require a plan to address a specific issue. "**No**" responses must be based upon specific knowledge. "**Unknown**" responses require appropriate follow-up for confirmation.

3.1 Clean Air Act (CAA)

The basic purpose of the CAA is to control air pollution by instituting point source controls (fixed and/or mobile) and establishing maximum pollutant levels for the ambient air. Permits to construct and/or operate are required for sources that meet regulatory requirements. These sources include, but may not be limited to: major stationary sources, hazardous air pollution sources, and sources subject to new source performance standards.

Yes	No	Unknown	Criteria for Evaluation
			General and Miscellaneous
☐	☐	☐	Will the project release contaminants to the air from a new or existing source of air contaminants?
☐	☐	☐	Does the project have the potential for deterioration of air quality?
☐	☐	☐	Will there be the introduction of smoke, suspended particles, or noxious gases/vapors (e.g., open burning, open detonation, etc.)?
☐	☐	☐	Will there be real or potential for particulate/dust migration beyond facility/site boundaries?
☐	☐	☐	Will WESTON own or operate a source of air emissions (e.g., air stripper, incinerator, thermal desorption system, soil vapor extraction system, fuel tanks or dispensers, electric generators, turbines) or disturb land?
☐	☐	☐	Will WESTON own or operate an air pollution control device (e.g., scrubber, vapor-phase activated carbon system)?
☐	☐	☐	Is fugitive emissions and/or perimeter air monitoring specified in the scope of work?
☐	☐	☐	Has client specified air monitoring methods or real-time monitoring?
			Prevention of Significant Deterioration (PSD) Permits (40 CFR 52)
☐	☐	☐	Is site within an attainment area? (See 40 CFR 81.301-356).
☐	☐	☐	Will the project involve construction or operation of a new major source with the potential to emit more than 100 tons/year for those specific listed emissions sources or 250 tons/year for all other emission sources types or a major modification of an existing major source with pollutant emission increases exceeding Prevention of Significant Deterioration (PSD) rates? (see 40 CFR 52.21(b) and/or CAA Section 169).
			Non-Attainment Permits (40 CFR 52)
☐	☐	☐	Is site within a non-attainment area? (See 40 CFR 81.301-356). If known, indicate which criteria pollutant(s) are not met.
			New Source Performance Standards (40 CFR 60)
☐	☐	☐	Will the project involve the release of contaminants to the air from a new or modified non-exempt source?
			NESHAPS Standards for Air Toxics (40 CFR 61, 63) See also TSCA and OSHA
☐	☐	☐	Will the project involve the demolition or renovation of any structure containing asbestos?
☐	☐	☐	Will the project involve a stationary source or group of stationary sources with the potential to emit 10 or more tons/year of a single HAP, or 25 tpy or more of multiple HAPs?
			Accidental Release and Risk Management Planning (40 CFR 68)
☐	☐	☐	Will the project involve storage and/or use of any chemical listed under 40 CFR 68.115 at or greater than its Threshold Planning Quantity (TPQ)?
			Operating Permits (40 CFR 70, 71)
☐	☐	☐	Will the project involve obtaining any permit as required under the CAA?
			Reduction in Use of Ozone Depleting Substances (40 CFR 82)
☐	☐	☐	Will site tasks involve repair, maintenance or decommissioning of objects containing ozone depleting substances (e.g., air conditioning/heat pump/refrigeration systems)?

State-Specific Requirements

As with many environmental regulations, States may have specific and/or additional regulations and laws associated with air and air quality. Remember to evaluate State and/or Local requirements.

3.2 Clean Water Act

The stated objective of the Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's water by regulating discharges of pollutants into water bodies. Major requirements to plan for include; point source discharges, stormwater discharges, pretreatment prior to sewer system discharge, spill prevention and response, and wetland modification and/or dredge and fill activities.

Yes	No	Unknown	Criteria for Evaluation
			General and Miscellaneous
☐	☐	☐	Will the project location involve fresh water, marine environment, ground water impact or other?
☐	☐	☐	Will the project involve impact to water movement (e.g., construction of dam)?
☐	☐	☐	Will the project involve any change in the quantity and/or quality of ground water?
☐	☐	☐	Is there any potential for spills of hazardous materials/substances/wastes that could subsequently impact water quality (surface or ground)?
☐	☐	☐	Will the project involve any impact to wetlands or floodplains?
☐	☐	☐	Is the project in a well head protection area?
☐	☐	☐	Will there be any injection of waste materials into the ground?
☐	☐	☐	Will unimproved roads or new haul roads be required?
☐	☐	☐	Will the project involve the disruption, displacement or compaction of soil?
☐	☐	☐	Will the project involve a change in topography at the site?
☐	☐	☐	Will the project create an increase in wind or water erosion of soils (either on or off-site)?
			NPDES Point Source Discharge Permit (40 CFR 122)
☐	☐	☐	Will the project involve a point source discharge into surface water?
			Stormwater Discharge Permit (40 CFR 122.26)
☐	☐	☐	Will the project involve an industrial facility with potential for stormwater discharges to surface water or to a storm sewer system?
☐	☐	☐	Will the project involve the disturbance of one or more acres of land?
			Pretreatment Requirements (40 CFR 403)
☐	☐	☐	Will there be a discharge (e.g., process water, groundwater, cooling water) to a sewer authority or public sewer system? (Do not include proper connections from domestic-type sources such as toilets or kitchens).
			Discharge of Oil and SPCC Plans (40 CFR 110, 112)
☐	☐	☐	Will oil or petroleum products be stored at the site/operation?
☐	☐	☐	Will the storage capacity of oil or petroleum products exceed 1320 gallons in above ground storage (include only containers equal to or larger than 55 gallons), or 42000 gallons underground?
			Wetlands Modification and/or Dredge and Fill Requirements (40 CFR 230-233)

Yes	No	Unknown	Criteria for Evaluation
☐	☐	☐	Will the project involve excavation in or the discharge or dredge or fill material into water or wetlands?
☐	☐	☐	Will the project involve site clearing, or dredging or filling on/near water or wetlands?

State Requirements

As with many environmental regulations, States have specific regulations and laws associated with water protection and quality. Remember to evaluate State and/or Local requirements.

3.3 Safe Drinking Water Act (SDWA)

The SDWA regulates the quality of drinking water. Requirements typically relate to providing public drinking water, waste disposal in underground injection wells and establishing criteria for CERCLA remediation.

Yes	No	Unknown	Criteria for Evaluation
Public Water Supplies and Drinking Water Standards (40 CFR 141-143)			
☐	☐	☐	Will WESTON be providing a drinking water supply to the public?
☐	☐	☐	Will the project involve operating a public water supply system that has 15 or more services or serves more than 25 people per day for more than 60 days per year?
Sole-Source Aquifer Protection (40 CFR 149)			
☐	☐	☐	Will the project involve the discharge of contaminants onto or into areas classified as a sole-source aquifer?
Underground Well Injection (40 CFR 144-148)			
☐	☐	☐	Will the project involve the placing of fluids into a bored, drilled, driven or dug well?

State Requirements

In addition to compliance (and/or more restrictive) with above Federal criteria, States are responsible for implementing and enforcing well-head protection standards.

3.4 Resource Conservation and Recovery Act (RCRA)

RCRA provides the classic "cradle-to-grave" concept for waste materials, i.e., management of the waste material from generation to final disposal. RCRA requirements apply to those who generate, transport, store and dispose of wastes. Permits and identification numbers may be required for all categories with limited exceptions.

Yes	No	Unknown	Criteria for Evaluation
Non-Hazardous Solid Wastes (40 CFR 257, 258)			
☐	☐	☐	Will WESTON or the site generate any non-hazardous solid wastes?
Universal Wastes (40 CFR 273)			
☐	☐	☐	Will WESTON, or the site generate any universal wastes?
Hazardous Wastes Generation and Management (40 CFR 260-262)			

Yes	No	Unknown	Criteria for Evaluation
☐	☐	☐	Will WESTON generate any hazardous wastes?
☐	☐	☐	Will WESTON be responsible for managing hazardous wastes generated by the client?
☐	☐	☐	Will site activities result in quantities that result in Conditionally Exempt Small Quantity Generator (CESQG), Small Quantity Generator (SQG), or Large Quantity Generator (LQG).
☐	☐	☐	Has on-site accumulation of waste stream (areas, containers or other device) been evaluated?
Hazardous Waste Treatment and Disposal Permit (40 CFR 264-270)			
☐	☐	☐	Will on-site treatment of waste(s) be conducted?
☐	☐	☐	If off-site disposal has TSDF been evaluated and accepted?
☐	☐	☐	Will the project involve clean-up of hazardous waste or hazardous waste constituents from a RCRA-regulated facility?
Hazardous Waste Transportation (40 CFR 263)			
☐	☐	☐	Will WESTON be responsible for preparing hazardous wastes for transportation?
☐	☐	☐	If transporting wastes, has transporter been evaluated and accepted?
☐	☐	☐	Will WESTON sign manifest? If yes, as Generator or as "Agent" for client?
Underground Storage Tanks (USTs) (40 CFR 280)			
☐	☐	☐	Will WESTON activities involve the installation, use, maintenance, spill or release clean-up, or decommissioning of a UST storing petroleum or CERCLA-listed hazardous substance?
Used Oil (40 CFR 279)			
☐	☐	☐	Will site activities involve the generation, storage or transportation of used/waste oil?
Land Disposal Restrictions (40 CFR 268)			
☐	☐	☐	Will the project involve the generation of wastes meeting Land Disposal Restriction (LDR) criteria?

State Requirements

Most States have primacy for both hazardous and non-hazardous solid waste; ensure knowledge of specific state requirements for such waste streams.

3.5 Comprehensive Environmental Response Compensation and Liability Act (CERCLA)

CERCLA provides a mechanism to clean up uncontrolled or abandoned contaminated sites and hold potentially responsible parties accountable for clean-up costs.

Yes	No	Unknown	Criteria for Evaluation
Release Reporting (40 CFR 300, 302)			
☐	☐	☐	Are any of the chemicals stored or used on site listed as a hazardous substance (40 CFR 302.4)?

Yes	No	Unknown	Criteria for Evaluation
☐	☐	☐	Is there a potential for an unpermitted release of a hazardous substance to the environment in excess of its 24-hour Reportable Quantity (RQ)?
			Remediation Efforts (40 CFR 300)
☐	☐	☐	Are site remediation efforts under control of Federal Government?
☐	☐	☐	Are site remediation efforts under control of a State or Local Government?
☐	☐	☐	Are site remediation efforts under Private control?

State Requirements

Many states have enacted Superfund-type programs. Although many are similar to the Federal program, others may have significant differences to include broader ranges of hazardous substances.

3.6 Emergency Planning and Community Right to Know (EPCRA)

EPCRA established a process for developing state and local emergency planning and information programs on hazardous chemicals located at and/or emitted from facilities. Planning requirements apply to any facility that produces, uses or stores threshold quantities or more of any substance on the EPA list of extremely hazardous substances. There are also requirements for facilities that are required to maintain Material Safety Data Sheets (MSDSs) to notify the local fire department of those materials.

Yes	No	Unknown	Criteria for Evaluation
			General
☐	☐	☐	Will WESTON or WESTON subcontractor have chemicals on site?
			Emergency Planning Notifications (40 CFR 355)
☐	☐	☐	Do any of the chemicals used or stored on site meet the definition of a hazardous substance and meet or exceed the threshold planning quantity (TPQ) for that chemical or 500 pounds, whichever is lower? (See 40 CFR Part 355 Appendix A and B). *If inventory meets criteria (material and quantity) then reports to LEPC, local Fire Department, and SERC are required. (See 40 CFR 370.21).*
			Emergency Release Notifications (40 CFR 370)
☐	☐	☐	Is there the potential for a release of listed substances (see 40 CFR 355, Appendices A and B and 40 CFR 302) that could result in exposure to persons off-site?
			Community Right to Know/Hazardous Chemical Inventory Reporting (40 CFR 370)
☐	☐	☐	At any point in time is any chemical in a quantity at or more than 10,000 pounds that requires an MSDS?

State Requirements

There are specific reporting and documentation requirements under EPCRA for state and local entities.

3.7 Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

The purpose of FIFRA is to protect public health and the environment from the misuse of pesticides by regulating the labeling and registration of pesticides. In addition to data necessary for the registration of pesticides sold there are requirements for the certification of applicators of those pesticides listed as restricted use.

Yes	No	Unknown	Criteria for Evaluation
			Labeling and Packaging Requirements (40 CFR 156, 157)
☐	☐	☐	Does the project involve the use or application of pesticides?
			Certification of Applicators (40 CFR 171)
☐	☐	☐	Is the use of a licensed pesticide applicator required (use of restricted use pesticides)?

3.8 Toxic Substances Control Act (TSCA) see also OSHA requirements

Much of TSCA deals with the manufacture, use and distribution of chemicals in commerce with limited impact to WESTON. There are, however, management requirements (to include remediation and disposal efforts) for specific chemicals (most importantly lead-based paint, PCBs, and asbestos).

Note: *A "**Yes**" will require an appropriate technical approach to address the toxic material and must be included within the project-specific HASP. A "**No**" will require appropriate documentation from the Client or their designee describing how this determination was reached. An "**Unknown**" will require follow-up and receipt of documentation prior to proceeding.*

WESTON may conduct its own survey and analysis to resolve "No" and "Unknown" responses if necessary.

Yes	No	Unknown	Criteria for Evaluation
			Lead-Based Paint (40 CFR 745)
☐	☐	☐	Has the site been evaluated for the presence of lead or lead-containing materials?
☐	☐	☐	Will the project involve the removal of lead-contaminated materials?
			Polychlorinated Biphenyls (PCBs) (40 CFR 761)
☐	☐	☐	Has the site been evaluated for the presence of PCBs or PCB-contamination?
☐	☐	☐	Will the project involve the removal or handling of PCBs?
			Asbestos (40 CFR 762)
☐	☐	☐	Does the site or structures contain asbestos containing material (ACM)?
☐	☐	☐	Will the project involve the disruption or removal of ACM?

3.9 Natural Resources and the Endangered Species Act

The Endangered Species Act (ESA) was passed to designate and protect fish, wildlife and plant species that are endangered or threatened as well as designate critical habitat for those species. Compliance with the ESA is required within the context of this checklist for not only necessary permits (e.g., Stormwater), but, as a means of understanding the potential environmental impact of our work efforts.

Yes	No	Unknown	Criteria for Evaluation
			General
☐	☐	☐	Is the project site in an area identified as habitat for endangered, threatened or special interest species?
☐	☐	☐	Will the project result in a change in the diversity or numbers of any species of plants or animals?

Yes	No	Unknown	Criteria for Evaluation
☐	☐	☐	Will the project result in the reduction of numbers or habitat damage to any unique, rare, threatened or endangered species of plants or animals?
☐	☐	☐	Will the project result in the introduction of new species of plant or animal (including microbes, etc.)?
☐	☐	☐	Will the project result in any barrier(s) to the migration or movement of animals?
☐	☐	☐	Will the project result in any significant alteration, deterioration, or destruction of habitat?
☐	☐	☐	Will the project result in the alteration, destruction, or significant impact to any environmentally sensitive areas (e.g., wetlands, floodplains, critical habitat, prime farm land, coastal zones, etc.)?

Note that a location-specific understanding of the ESA is necessary for completion of applications relating to air quality permitting, stormwater permitting and potentially others.

3.10 National Environmental Policy Act

The purpose of the National Environmental Policy Act (NEPA) is to encourage harmony between man and the environment, promote efforts to prevent or eliminate damage and stimulate the health and welfare of man, and to enrich the understanding of the ecological systems and natural resources that are important to the Nation. In context, NEPA requires federal agencies to prepare an environmental impact statement covering proposed actions that could significantly affect the quality of the human environment.

Yes	No	Unknown	Criteria for Evaluation
			General
☐	☐	☐	Is the project a major Federal action, or project, or a project requiring a federal permit, receiving federal funds, or located on federal land? (NEPA)

3.11 Noise (see also OSHA requirements)

The Noise Control Act promotes the policy that the environment is to be free of noise that jeopardizes health or welfare. While there are limited Federal/EPA regulations, there are State and Local regulations/ ordinances that are applicable to work tasks.

Yes	No	Unknown	Criteria for Evaluation
			General
☐	☐	☐	Will the project cause an increase in noise levels?
☐	☐	☐	Is the project site near sensitive receptor populations (e.g., residences, hospitals, schools, etc.)?
☐	☐	☐	Will site activities extend beyond typical daylight hours?
☐	☐	☐	Are there local noise ordinances in effect?
☐	☐	☐	Does the contract (or specifications) identify noise monitoring or other criteria?

3.12 Occupational Safety and Health (specifically 29 CFR 1910 and 1926)

The overall goal of the Occupational Safety and Health Act (OSH Act) is to assure that employees are not adversely affected to hazards that they may be exposed to in the course of employment. All work activities conducted by WESTON must comply with applicable components of the General Industry Standards, the Construction Standards, or the applicable requirements of Client-specific criteria (e.g., the Corps of Engineers).

Yes	No	Unknown	Criteria for Evaluation
			General
☐	☐	☐	Will project activities be conducted under OSHA Construction Standards?
☐	☐	☐	Will project activities be conducted under OSHA General Industry Standards?
☐	☐	☐	Will project activities be conducted under the requirements of EM 385-1-1 (USACE)?
☐	☐	☐	Does the client have any specific occupational/safety requirements for the site work?
☐	☐	☐	Will project activities be conducted under other standards?

Based upon site activities, location and tasks follow all applicable criteria outline in WESTON's Safety and Health requirements guidelines.

3.13 Transportation (specifically 49 CFR Parts 171-179, 383, 390-399)

Transportation in the context of this checklist typically relates to the transportation of hazardous chemicals. The Department of Transportation (DOT) has specific regulatory requirements that must be met if WESTON either conducts or oversees the preparation for transport or actual transportation of hazardous chemicals/materials designated by DOT.

Note: *Security Plans are required for transporting hazardous materials in an amount that must be placarded, hazardous materials in a bulk packaging having a capacity equal to or greater than 3,500 gallons for liquids or gases or more than 468 cubic feet for solids, or a select agent or toxin regulated by the Centers for Disease Control and Prevention under 42 CFR Part 73. Contact your local Dangerous Goods Advisor for assistance.*

Yes	No	Unknown	Criteria for Evaluation
			General
☐	☐	☐	Will site activities involve the transportation (or storage incidental to transportation) of hazardous materials?
☐	☐	☐	Will WESTON personnel be transporting hazardous materials (in any amount)?
☐	☐	☐	Will WESTON personnel be operating vehicles meeting the definition of a commercial vehicle?
☐	☐	☐	Will WESTON personnel be operating vehicles transporting a hazardous material in a placarded amount?

3.14 Radiation

Various regulations under the auspices of the Nuclear Regulatory Agency (10 CFR) require specific procedures for the handling, training, storage and maintenance of nuclear materials.

Yes	No	Unknown	Criteria for Evaluation
			General *(For the following questions indicate whether these tasks are by WESTON, Subcontractor, Client or Vendor.)*
☐	☐	☐	Will Radiation sources be used or present?
☐	☐	☐	Will the project involve the transportation of radioactive material?
☐	☐	☐	Will the project involve the storage of radioactive material?
☐	☐	☐	Will the project involve the disposal of radioactive material?
☐	☐	☐	Will the project involve the use or storage of a radioactive source (e.g., troxler gauge, XRF)?
☐	☐	☐	Have users been properly trained and certified?
☐	☐	☐	Are users operating under a radiation monitoring program?
☐	☐	☐	Have rad licenses been transferred and/or the client notified of the presence of rad sources?

Based upon site activities, location and tasks follow all applicable criteria outlined in WESTON's EHS Program.

3.15 Historic/Archaeological

There are numerous Federal, State, Local and Tribal requirements outlining procedures to protect historic and cultural properties. These include those that exist as well as those that are discovered during work activities.

Yes	No	Unknown	Criteria for Evaluation
			General
☐	☐	☐	Is the site or project in an area that is of historic or archeological interest?
☐	☐	☐	Will the project result in alteration or destruction of an archeological or historical site, structure, object or building that is on or eligible for inclusion in the National Register of Historic Places?
☐	☐	☐	Will the project involve the excavation, altering, defacing, or removal of archaeological objects or resources or Native Indian graves, cairns, or glyptic records?

Note that a location-specific understanding of historic and archaeological issues is necessary for completion of applications relating to air quality permitting, stormwater permitting and potentially others.

3.16 Miscellaneous

The following items are included based upon information that must be evaluated for certain WESTON work criteria, for certain sites e.g., real-estate transactions, military locations and for specific hazards.

Yes	No	Unknown	Criteria for Evaluation
			General
☐	☐	☐	Have subcontractors been screened by Procurement and an EHS Manager or Safety Officer?
☐	☐	☐	Has a Client Services Manager (CSM), Project Manager (PM), or WESTON Officer engaged WESTON's Subcontractors using the Subcontractor Talking points?

Yes	No	Unknown	Criteria for Evaluation
☐	☐	☐	Has a project Kick-off meeting been planned?
☐	☐	☐	Will a Safety Officer or an EHS Manager be involved in the kick-off meeting?
☐	☐	☐	Will the average work day including driving to and from the site exceed 12 hours? If yes, there must be a plan for addressing driving safety and fatigue.
☐	☐	☐	Will project personnel be driving vehicles they are not familiar with? If yes, there must be a plan for addressing driving safety.
☐	☐	☐	Will there be work at elevation (greater than 4 foot difference in elevations between working levels, work from ladders, work from scaffolding, use of aerial lifts, floor openings, wall openings)?
☐	☐	☐	Will there be potential for struck by hazards (moving equipment, thrown or falling objects or material)?
☐	☐	☐	Will there be potential for being caught in (conveyors, power-take-off, screens, etc.) or between moving machinery?
☐	☐	☐	Will there be work with or within 10 feet of exposed electrical conductors?
☐	☐	☐	Are there overhead utilities?
☐	☐	☐	Are there underground utilities?
☐	☐	☐	Will the project add additional traffic volume or types (material or equipment haul trucks) that may require community approval or plans?
☐	☐	☐	Will there be a traffic control plan for off-site and on-site vehicles?
☐	☐	☐	Is the facility a military facility?
☐	☐	☐	Has the potential for UXO/MEC encounter been objectively evaluated?
☐	☐	☐	Will there be slip, trip and fall hazards
☐	☐	☐	Will there be repetitive and or heavy lifting?
☐	☐	☐	If demolition work has the demolition plan, engineering survey and required components been addressed?
☐	☐	☐	Are there OSHA Specific Standards applicable (asbestos, lead, cadmium, arsenic, hexavalent chromium, benzene, vinyl chloride, methylene chloride, butadiene, formaldehyde, dibromochloropropane?
☐	☐	☐	Will work be performed over or near water or boats?
☐	☐	☐	Will boats be used?
☐	☐	☐	Will Lifting Equipment and rigging be used?
☐	☐	☐	Is there a communication Plan for letting neighbors know of WESTON activities that may impact them?

3.17 Real Estate and Tenant Issues

WESTON as an owner or operator assumes liability for actions or activities conducted by ourselves or by others (tenants). We must ensure compliance with Federal, State and Local requirements. The following outline major issues, however, as indicated previously for the EHS Checklist, it is not meant to be comprehensive. Remember, if we have tenants occupying portions of facilities that are under our control, we have an obligation to understand and assure compliance. For the following issues compliance may be by WESTON, by various tenants or a combination, ensure that each tenant is evaluated. Note that various components of the previous EHS Checklist sections may be appropriate.

Yes	No	Unknown	Criteria for Evaluation
			Air
☐	☐	☐	Are boilers or other pressure vessels (e.g., chillers, air receivers) located within our work space or at tenant locations?
☐	☐	☐	Have they been certified and inspected?
☐	☐	☐	Do emission sources (e.g., boilers, chillers, bulk oil storage, etc.) have proper registration (federal, state or local)?
☐	☐	☐	Are tenants responsible for compliance with inspections and permits?
☐	☐	☐	Is WESTON responsible for inspections and permits?
			Occupancy and Other Permits
☐	☐	☐	Do Business Permits/Certificate of Occupancy Requirements: State, County, City/Municipality need to be addressed? If yes, is WESTON responsible? ____ and/or are tenants responsible? ____
☐	☐	☐	Are Fire Code Inspections (e.g., materials storage, electrical, suppression systems) due? Are Corrective Actions due from past inspections? ___ If yes, is WESTON responsible? ____and/or are tenants responsible? ___
☐	☐	☐	Are local permits and/or registrations for USTs or ASTs available or needed?
			RCRA
☐	☐	☐	Is the facility a Hazardous Waste Generator? If yes, what size? ____ Is WESTON responsible? ____ What is the waste stream? _____
☐	☐	☐	Do tenants generate Hazardous Wastes? If yes, what quantity? ____ What is the waste stream? ____
☐	☐	☐	Are appropriate permits available for waste generation?
☐	☐	☐	Is facility and/or are tenants under litigation or regulatory action for non-compliance with RCRA?
☐	☐	☐	Are USTs or ASTs on site? If yes, what are type, size, contents _____
☐	☐	☐	Have USTs been upgraded for overflow and spill control protection?
			Water and Stormwater
☐	☐	☐	Is a stormwater permit and plan necessary for the site?
☐	☐	☐	Is a NPDES and/or local discharge permit necessary for the site?
			EPCRA
☐	☐	☐	Do any of the chemicals used or stored on site meet the definition of a hazardous substance and meet or exceed the threshold planning quantity (TPQ) for that chemical or 500 pounds, whichever is lower? (See 40 CFR Part 355 Appendix A and B). *If inventory meets criteria (material and quantity) then reports to LEPC, local Fire Department and SERC required. (See 40 CFR 370.21).*
☐	☐	☐	Is WESTON responsible for compliance?

Yes	No	Unknown	Criteria for Evaluation
☐	☐	☐	Are Tenants responsible for compliance?
			SPCC and Oil
☐	☐	☐	Will oil or petroleum products be stored at the site/operation?
☐	☐	☐	Will the storage capacity of oil or petroleum products exceed 1320 gallons in above ground storage (include only containers equal to or larger than 55 gallons), or 42000 gallons underground?
☐	☐	☐	Is WESTON responsible for compliance?
☐	☐	☐	Are Tenants responsible for compliance?
			Compliance
☐	☐	☐	Is the site under enforcement action for regulatory non-compliance?
☐	☐	☐	Is any Tenant under enforcement action for regulatory non-compliance?

3.18 Explosives

Various regulations under the auspices of the Bureau of Alcohol, Tobacco, Firearms and Explosives (BATFE), 27 CFR Part 55 – Commerce in Explosives and 27 CFR Part 55 the Safe Explosives Act, require specific procedures for the purchase, use, storage, handling and sale of explosives or explosive containing items. Attention to these questions will help to manage our risk when developing projects that may involve explosives or munitions.

Yes	No	Unknown	Criteria for Evaluation
			General
☐	☐	☐	Will the project involve the handling or use of explosives or munitions that are either new or recovered (e.g. dynamite, military munitions, UXO, detonating cord, TNT, etc.)?
☐	☐	☐	Will the project involve the storage of explosives?
☐	☐	☐	Will the project involve the transportation of explosives?
☐	☐	☐	Have project personnel been cleared by BATFE as either a Possessor or Responsible Party to handle explosives?
☐	☐	☐	Will the project require a State Licensed Blaster?
☐	☐	☐	Will WESTON's Explosives Users Permit be required to execute the project? If yes, has the UXO Service Line Manager been notified?

3.19 Sustainability

There are a wide range of options for integrating sustainability into the execution of projects, far beyond what can be incorporated into this checklist. The following are a few broad questions which are designed to stimulate thinking about how sustainable approaches could be utilized throughout project execution. A checklist of credits used in evaluating projects for LEED (Leadership in Energy and Environmental Design) could be used here in addition to the checklist below. Inclusion of an employee who is LEED AP Certified in the development of the work plan could help add other considerations, such as sustainable sites and efficient materials and resources. See the WESTON Sustainability Portal http://westonportal/sites/sustainability/default.aspx for further details.

Yes	No	Unknown	Criteria for Evaluation
			General
☐	☐	☐	Are there opportunities to reduce travel-related energy and environmental impacts associated with the project through such techniques as carpooling, use of videoconferencing, telecommuting or utilization of local personnel?
☐	☐	☐	Has consideration been given to the potential for beneficial reuse or recycling of materials that will be excavated, removed or discarded during project execution?
☐	☐	☐	Are there opportunities to utilize alternative or renewable energy on the project, through applications such as photovoltaics (solar) or wind power for remote sensing and/or trailer power, or alternative fuel (e.g. biodiesel) for fleet vehicles or equipment?
☐	☐	☐	Have "green" considerations been integrated into the procurement process for materials and or equipment (e.g. recycled content, energy efficiency, recyclability, minimal packaging)?
☐	☐	☐	Are there opportunities to increase energy or water efficiency in the execution of the project through selection of appropriate equipment or technical approaches?
☐	☐	☐	Are there opportunities to offset some of the environmental impacts of the project through purchase of carbon credits, renewable energy credits or wetlands banking?
☐	☐	☐	Could a Community Partnering/Make-a-Difference event be coordinated or integrated with this project?

MAPQUEST.

Notes

Trip to Henry Ford Health System

1 Ford Pl, Detroit, MI 48202 - (313) 874-6677

9.33 miles - about 17 minutes

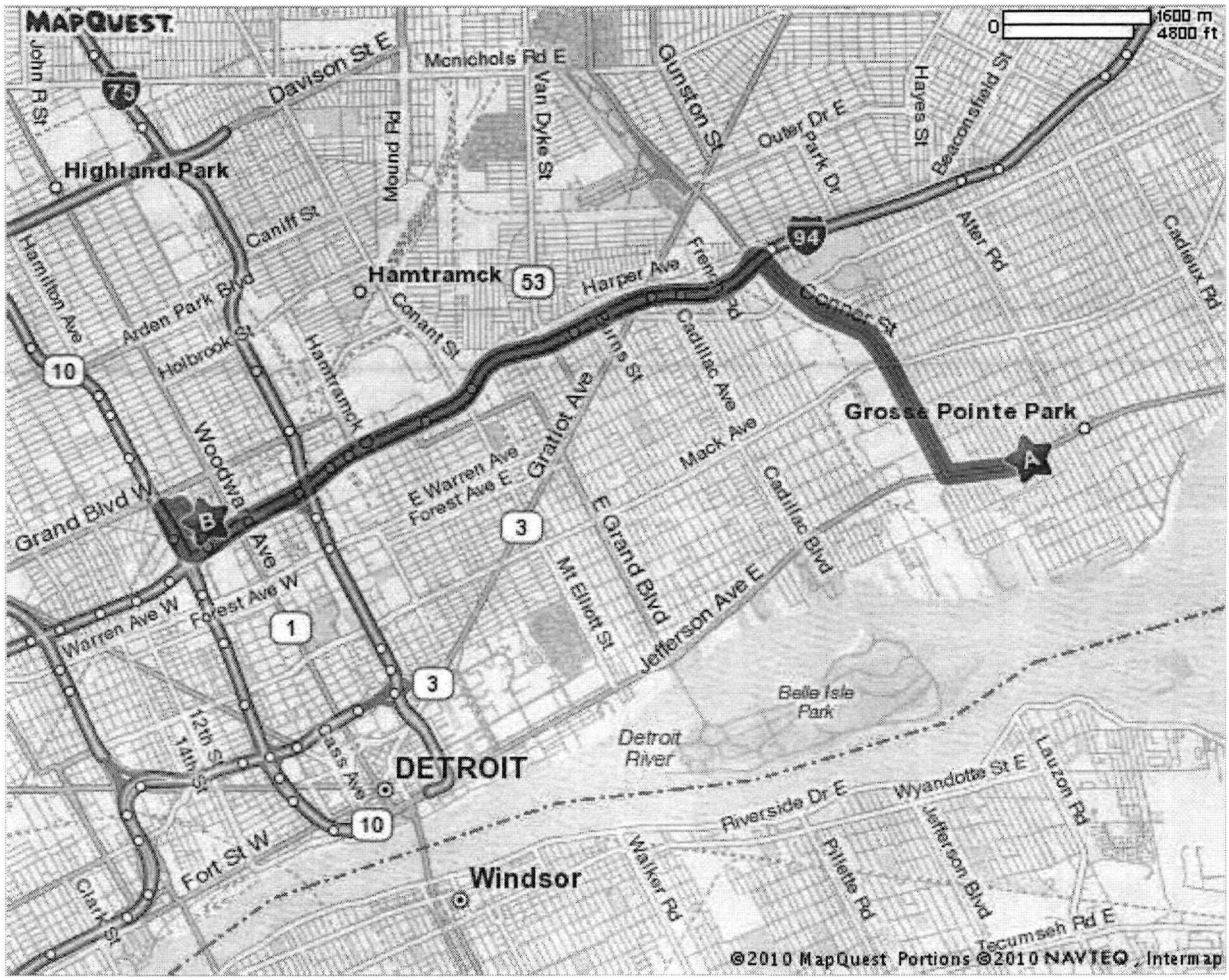
E Jefferson Ave & Newport St, Detroit, MI 48215

1. Start out going **WEST** on **JEFFERSON AVE E** toward **NEWPORT ST**.	go 0.7 mi
2. Turn **RIGHT** onto **CONNER ST**.	go 2.4 mi
3. Merge onto **I-94 W** via the ramp on the **LEFT**.	go 5.1 mi
4. Take the **M-10 N** exit, **EXIT 215B**, toward **SOUTHFIELD**.	go 0.3 mi
5. Merge onto **MI-10 N / JOHN C LODGE FWY**.	go 0.2 mi
6. Take the **MILWAUKEE AVE** exit, **EXIT 4C**, toward **W GRAND BLVD**.	go 0.1 mi
7. Take the **TO BALTIMORE ONLY** ramp.	go 0.0 mi
8. Turn **SLIGHT RIGHT** onto **BALTIMORE ST W**.	go 0.1 mi
9. Turn **RIGHT** onto **3RD ST**.	go 0.2 mi
10. Turn **LEFT** onto **FORD PL**.	go 0.1 mi
11. **1 FORD PL** is on the **RIGHT**.	go 0.0 mi

Henry Ford Health System - (313) 874-6677
1 Ford Pl, Detroit, MI 48202

Total Travel Estimate : 9.33 miles - about 17 minutes

Route Map Hide



All rights reserved. Use subject to License/Copyright | Map Legend

Directions and maps are informational only. We make no warranties on the accuracy of their content, road conditions or route usability or expeditiousness. You assume all risk of use. MapQuest and its suppliers shall not be liable to you for any loss or delay resulting from your use of MapQuest. Your use of MapQuest means you agree to our Terms of Use