

Qualitative Exposure Assessment – Multiple Agent Form

APPLICABILITY: It should be noted that the purpose of this document is to define priorities and resources for quantitative exposure monitoring or other evaluation and control tools to reduce the risk associated with this project. **THIS DOCUMENT DOES NOT DEFINE REQUIRED CONTROLS** for the project RSS. The text of the RSS defines the engineering and administrative controls necessary to mitigate the hazards associated with these activities.

Project Information

No QEA is required based upon a review of the type(s) of hazard(s) associated with the activity/task

QEA could not be conducted at the time the RSS/Work Plan was reviewed/approved due to inadequate information provided by the PI, Work Planner/Package author on some or all agent(s)/hazard(s). List the agent(s) for which a QEA could not be conducted: All Agents (see below) or Specific Agent(s) that could not be assessed: (1) **Temperature Extremes-** Qualitative exposure assessments of heat stress cannot be conducted due to the extreme variability of climate conditions, environmental factors, and worker fitness. Contact your SSD representative when anticipating working in temperature extremes. The real time climate conditions will be evaluated and protective measures prescribed to include as necessary, but not limited to, a pre-job briefing, work-rest cycles, biometric monitoring, PPE, etc. (2) **Ergonomics:** Qualitative exposure assessments of ergonomic stressors cannot be conducted due to the variability of environmental factors, work equipment usage, and worker physical capabilities. Specific work activities have not yet been developed and are likely to change in the field conditions. Contact your SSD representative for assistance in evaluating a specific activity. Field use conditions will be evaluated and protective measures prescribed to include as necessary, but not limited to, a pre-job briefing, work cycle adjustment, on –the-job training, PPE, etc.

Process/Job/Task: (SEG/SET Name) RSS 7728 tasks

Work Description: The Response SFA provides targeted experiments to assess vulnerability of terrestrial ecological systems to projected changes in climatic and atmospheric composition. The science will be conducted in the black spruce forest in northern Minnesota (southern extent of spatially expansive boreal peatland forest – Marcell Experimental Station)

Facility #: Field Work	Room/Lab/Shop #: See RSS
Organization: BESD	RSS/Work Plan #: 7728

Agents and Control Information

	Process/Job/Task	Agent	Quantity or Magnitude	¹ Entry Route	Physical State	Freq	Duration	² PPE	³ Engr / Admin Controls	HSR 1-4	ER 1-4	CR 1-3	⁴ QEAR 1-24	⁵ Exposure Decision
1	Field work (pneumatic post drivers and air compressors)	Noise	>85 dBA TWA ₈	NA	NA	Weekly	<6 hr.	HPDs	T (Use HPD's where noise level exceed an action level of 85 dBA.)	4	1	1	5	ACC
2	Lab activities	Chemicals	Various	Inh, S, A	Gas, Liquid, Solid	Weekly	<6 hr.	EP, G	Chemicals hazards and controls are defined by project specific RSS (e.g., 824, 8488, etc.)	2	1	1	3	ACC

1. Routes of entry codes: Inh – Inhalation, P – Penetration, Ing – Ingestion, S – Splash; A – Absorption; **2. PPE Codes:** COV – Coverall (e.g. Tyvek, Saranex, etc.), CV- Cooling vest, EP – Eye protection, FR – Flame Resistant Clothing, FS – Face Shield; G – Gloves, HPD – Hearing Protection Device, LC – Lab Coat, WH – Welding Helmet, APR – Air Purifying Respiratory, PAPR – Powered Air Purifying Respiratory, SAR – Supplied Air Respirator or SCBA; **3. Engineering Control codes:** GB – Glovebox, GV – General Ventilation, Hood – Other LEV Hood, I/E – Isolate or Enclose Hazard, LH - Lab Hood S – Shielding, W – Wet Methods; **Administrative Control Codes:** T – Training, L/P – Labeling or Postings, P – Written procedure/plan; LT – Limited Stay Time; W/R – Modified Work/Rest Cycle, BEI – Biological Monitoring, MS – Medical Surveillance; **4. QEA Rating** = (Health Severity Rating[HSR] + Exposure Rating [ER]) X Certainty Rating [CR]; **5. Exposure Decision:** Acceptable (2-7), Uncertain (8-15), Unacceptable (16-24)

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Exposure Decision and Follow-up						
Acceptable Exposure (LOW RISK)			Uncertain and Unacceptable Exposures			
Was Agent Hazard Acceptable (Low Risk)?		If yes, describe justification for classification as acceptable	Follow-up Priority	Follow-up Schedule	Is Quantitative Monitoring Required?	Recommendations/Comments
1	ACC	QEA rating provides acceptable exposure decision	Low	Annual	No	Quantitative monitoring is not likely to be considered after simulated information collection. Review the exposure assessment and new or changing tasks during the annual RSS review
2	ACC	QEA rating provides acceptable exposure decision	Low	Annual	No	Quantitative monitoring is not likely to be considered after simulated information collection. Review the exposure assessment and new or changing tasks during the annual RSS review

Qualified H&S Professional: Jarrad D. Stump

Date: June 19, 2014