

ENVIRONMENTAL MONITORING FORM FOR WORK ON FEDERAL LAND

Work Type :	Drilling of pumping test wells and monitoring wells. Management of drilling cuttings and pumped water. Performing pumping tests.					
Location :	CFB Valcartier and DRDC					
Date of work :						
Monitoring Date:						
Previous Monitoring Dates:						
			TO PROVIDE		MITIGATION MEASURE ACHIEVED	COMMENTS
ACTIVITIES AND ENVIRONMENTAL ASPECTS	MITIGATION MEASURES	APPLICATION PERIOD	Photos	Documents	Yes No N/A	(If not achieved or N/A, please justify)
Preparing for Spills and Leaks	A copy of the Emergency Response Plan (ERP) in the event of spills must be available on the work site. Response kits containing the equipment needed to contain and recover a spill are present in sufficient quantity on the work site. Employees know the ERP and the location of the kits. They know where to find them and how to use them.	Start		EMP		
Spill Response	Apply the procedures described in the Emergency Response Plan (ERP). In all cases, ensure people's safety first, and stop, contain and recover the spill. Take pictures before, during and after the intervention.	During work	yes			
Spill Reporting	Consult the ERM to find out if it is necessary to contact the intervention resources below: BASE territory - CFB Emergency Centre: 418-844-5333 or 911. The contract representative will notify the environmental officer. DRDC territory: 844-4000 extension 4211 or 911 for the DRDC territory. The DRDC Environment Officer will be automatically notified. Send an incident report within 24 hours of the event to the contract representative.	During work				
Management of machinery and equipment_ Condition and operation	The use of machinery running on vegetable oil is mandatory for the work to be done near the DRDC access road (more precisely north of the access road) and in the watercourse. Before starting work, inspect the machinery and equipment and then maintain it so that it is in good working order (clean and without evidence of leaks). Upon request, provide a recent machinery inspection certificate. Remove from the work site any vehicle or equipment producing abnormal emissions or excessive noise, as well as any vehicle that is no longer required. Avoid idling of vehicles and equipment.	Before/During work				
Management of machinery and equipment_ Traffic, parking and refueling	Encourage the use of existing roads and limit the movement of machinery near water bodies (i.e. ditch). Fording of machinery in the ditch is prohibited at all times. Locate parking areas more than 30 meters from the ditch or sewer manhole. Whenever possible, refuel vehicles and equipment outside of DND territory. Otherwise, refuel vehicles and equipment more than 30 meters from any water bodies (ditch), on a flat and impermeable surface, protecting the spill point (nozzle) with a retention tank or absorbent material and/or a rag. Store gasoline containers or other containers of hazardous materials in a closed shelter and on an impermeable surface and more than 30 meters from the body of water (ditch) or manholes. Any use of a bulk petroleum product tank must be authorized in advance by the DND Environment section.	During work				
Management of machinery and equipment_ Protection of existing monitoring wells	Identify and provide a minimum safe distance of 2 meters near infrastructure likely to be damaged, such as existing monitoring wells in the sector. Report any damage to an infrastructure to the contract representative, who will be responsible for notifying the DND Environment section if necessary.	Start/During work				
Monitoring wells and pumping test wells_ Drilling cuttings management	Analyze the drilling cuttings samples for the requested parameters and provide the results and chemical analysis certificates to the DND Environment section (by the DND Consulting Engineer). The drill cuttings (soil) awaiting the results must be stored in waterproof containers or on an impermeable surface covered with a waterproof membrane. In the event that the drill cuttings present concentrations above the applicable criteria for the reuse of soils on DND property (Quebec criterion "A"), the drill cuttings will be disposed of off-site in accordance with the provincial regulations. Otherwise, they may be laid near the borehole or taken to a storage site designated by the DND representative."	During work				
Pumping test wells_ Management of development water	<u>East Sector (DRDC)</u> : Discharge development water from wells PPE-1 and PPE-2 into the wooded area using a pipe (approximately 50 m) for the purpose of infiltration. Work areas should not be flooded when discharging development water. <u>West Sector (Base)</u> : Discharge development water from well PPO-1 and from the injection well to the wooded area and the fallow area, respectively, using a pipe (approximately 30 m) for the purpose of infiltration. Work areas should not be flooded when discharging development water.	During work				
Pumping test wells_ Management of pumping water	For the East Sector, obtain the chemical analysis results of the treatment test before starting the pumping tests to ensure the effectiveness of the treatment unit (by the DND Consulting Engineer). Take samples of the treated water for chemical analysis purposes according to the specified parameters and provide chemical analysis certificates to ensure that the water discharged into the ditch meets the MELCC effluent Acute Value Criteria for Volatile Organic Compounds (VOCs) and suspended solids (by DND Consulting Engineer).	During work				
Drilling equipment_ Washwater and sludge management	The washing water from the drilling equipment (casing, drill string and drill bit) and the sludge generated will be recovered and disposed of by the Contractor in an authorized disposal site in accordance with the regulations in force. Disposal certificates shall be provided to the DND representative upon request.	During work				

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Protection of species at risk and migratory birds	The Contractor will be informed of the presence of species at risk in the work area. A brief description of the species potentially present will be provided, if applicable. If a species at risk (bat or other) or a bird's nest is observed and whose work could harm this species, immediately cease the disturbing activity to avoid any disturbance and immediately notify the DND Environment section, which will dictate the action to be taken.	Before/During work				
Invasive exotic species control	The Contractor must be aware of the importance of controlling invasive exotic species (IES) and take the necessary measures to minimize the spread of IES. A verification of the measures to minimize the spread of IES may be carried out by the DND representative. The Contractor must clean the vehicles prior to their arrival at the site to ensure that they are free from IES.	Before/During work				
Management of residual materials and waste	No residual material or waste is abandoned, buried or burned on the site.	During work				

Comments: Observations on the site, presence of wildlife, poor waste management, presence of used oils, leaks on machinery, work carried out not taken into account in the environmental assessment, any details not mentioned in the mitigation measures, etc.

SITE PHOTOGRAPHS					
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5					
6					

MONITORING PERFORMED BY	
Prepared by:	
Date :	
Organization :	
Phone :	
E-mail :	