

Pacific Blasting & Demolition Ltd.

'APPENDIX A' - PROJECT HAZARD ANALYSIS

Project: _____ Job No. _____

Conducted By: _____ Date: 8/12/2004

Site Conditions and Accesses

Site Access Restricted access Vehicle passes required
Locations Restricted parking Bussing required

Explain:

Personnel Requirements Labourers Drywall Wood Salvage
 Operating engineers (OE) Asbestos Mech. Salvage
 Sub-contractors PCB

Explain:

Office Requirements No Office required Rental Trailer Required
 Space at site provided Sharing office trailer

Explain:

Trailer Utility Hookup Requirement Electrical Sewer Client responsible
 Telephone Internet PBDL responsible
 Water Cable
 Other

Explain:

Site Washrooms & Sanitation Service provided by client Trailer required
 Service shared Water hookup required
 Provided by PBDL Sewer service required
 Service provided by others Bladder required

Explain:

Hazard Analysis Continued...

<u>Restricted Areas on Site</u>	<input type="checkbox"/> No restricted areas on site	<input type="checkbox"/> Signage required by PBDL
	<input type="checkbox"/> Signage provided by client	<input type="checkbox"/> Site Plan Required
Explain:		

<u>Security Requirements</u>	<input type="checkbox"/> Not required	<input type="checkbox"/> Provided by	<input type="checkbox"/> Provided by PBDL
	<input type="checkbox"/> Hours required; from	to	Days per week
Explain:			

<u>Site Fencing Requirements</u>	<input type="checkbox"/> Not required	<input type="checkbox"/> Provided by Client / Prime contractor
Explain:		

<u>Conflicts On / Off Site</u>	<input type="checkbox"/> No Conflicts <input type="checkbox"/> Other contractors <input type="checkbox"/> Client Employees/Business	<input type="checkbox"/> Public <input type="checkbox"/> Our Sub-contractors <input type="checkbox"/> Commercial Activities
Explain:		

<u>Evacuation / Muster Stations</u>	<input type="checkbox"/> Clients procedures & muster station	<input type="checkbox"/> Map provided
	<input type="checkbox"/> PBDL procedures	<input type="checkbox"/> Signage required
	<input type="checkbox"/> Map required	
Explain:		

<i>Occupational Hygiene & Hazardous Products</i>

<u>Asbestos / ACM</u>	<input type="checkbox"/> Not applicable	<input type="checkbox"/> Abatement by Client
	<input type="checkbox"/> Working near / not disturbing	<input type="checkbox"/> Abatement by PBDL
	<input type="checkbox"/> Abatement required	
	<input type="checkbox"/> Mod risk (<input type="checkbox"/> roofing <input type="checkbox"/> drywall <input type="checkbox"/> linoleum <input type="checkbox"/> siding/transite)	
	<input type="checkbox"/> High risk (<input type="checkbox"/> friable insulation <input type="checkbox"/> pipe covering/ glove bags <input type="checkbox"/> other)	
Explain:		

Hazard Analysis Continued...

<u>Blasting or Powder Actuated Tools</u>	<input type="checkbox"/> Not applicable <input type="checkbox"/> Blasting used (SWP required) <input type="checkbox"/> Powder actuated tools	<input type="checkbox"/> Safe storage required <input type="checkbox"/> Training required	
Explain:			

<u>Chemicals & Other products</u>	<input type="checkbox"/> None known <input type="checkbox"/> Known locations	<input type="checkbox"/> Client to remove <input type="checkbox"/> PBDL to remove	<input type="checkbox"/> Storage area on site <input type="checkbox"/> Manifests required
Explain:			

<u>Environmental Hazards</u>	<input type="checkbox"/> Not applicable <input type="checkbox"/> Working near/over water (<input type="checkbox"/> tidal water <input type="checkbox"/> river) <input type="checkbox"/> Fueling equipment near water/drains	<input type="checkbox"/> Spill response procedures <input type="checkbox"/> Drain protection required <input type="checkbox"/> Permits required	
Explain:			

<u>Gas or Explosion Hazards</u>	<input type="checkbox"/> None known <input type="checkbox"/> Underground gas lines <input type="checkbox"/> Adjacent tanks / vessels <input type="checkbox"/> Sewer lines	<input type="checkbox"/> Monitoring required (<input type="checkbox"/> continuous <input type="checkbox"/> regular) <input type="checkbox"/> Special evacuations procedures <input type="checkbox"/> Notification of others required	
Explain:			

<u>Lead Hazards</u>	<input type="checkbox"/> None known <input type="checkbox"/> Abatement required (<input type="checkbox"/> by client <input type="checkbox"/> by PBDL) <input type="checkbox"/> NOP & procedures required		
Explain:			

<u>PCB Hazards</u>	<input type="checkbox"/> None known <input type="checkbox"/> Transformers (<input type="checkbox"/> testing required <input type="checkbox"/> draining required) <input type="checkbox"/> Light ballasts (<input type="checkbox"/> removed by client <input type="checkbox"/> removed by PBDL) <input type="checkbox"/> Switch Gears (<input type="checkbox"/> testing required <input type="checkbox"/> draining required) <input type="checkbox"/> Other source <input type="checkbox"/> Site storage & signage		
Explain:			

Hazard Analysis Continued...

<u>Utility Systems in Area</u>	<input type="checkbox"/> N/A <input type="checkbox"/> Isolation required (<input type="checkbox"/> by client/prime <input type="checkbox"/> by PBDL) <input type="checkbox"/> Lockout required (<input type="checkbox"/> by client/prime <input type="checkbox"/> by PBDL) <input type="checkbox"/> Hydro <input type="checkbox"/> Telephone <input type="checkbox"/> Gas <input type="checkbox"/> Water <input type="checkbox"/> Sewer <input type="checkbox"/> Other
Explain:	

<u>WHMIS Products & requirements</u>	<input type="checkbox"/> Diesel <input type="checkbox"/> Gasoline <input type="checkbox"/> Oxygen <input type="checkbox"/> Propane	<input type="checkbox"/> Caulking / Sealants <input type="checkbox"/> WD 40 <input type="checkbox"/> Hydraulic Fluid <input type="checkbox"/> Motor Oils	<input type="checkbox"/> Concrete <input type="checkbox"/> Grouts <input type="checkbox"/> _____ <input type="checkbox"/> _____
List other products & Explain:			

<i>Site and Worker Health & Safety</i>

<u>N.O.P. Requirements</u>	<input type="checkbox"/> Not required <input type="checkbox"/> Required (<input type="checkbox"/> by client <input type="checkbox"/> By PBDL) <input type="checkbox"/> NOPA (Asbestos, Lead etc.)
Explain:	

<u>Confined Space Entry</u>	<input type="checkbox"/> Not required <input type="checkbox"/> Required <input type="checkbox"/> Hazard analysis (<input type="checkbox"/> provided <input type="checkbox"/> required) <input type="checkbox"/> Lockout required (<input type="checkbox"/> individual lock points <input type="checkbox"/> lock box provided) <input type="checkbox"/> Stand by worker required (<input type="checkbox"/> client supplied <input type="checkbox"/> PBDL supplied) <input type="checkbox"/> Gas testing required (<input type="checkbox"/> client supplied <input type="checkbox"/> PBDL supplied) <input type="checkbox"/> Rescue procedures provided <input type="checkbox"/> Rescue procedures required
Explain:	

<u>Cranes & Hoisting</u>	<input type="checkbox"/> Not required <input type="checkbox"/> Weights provided <input type="checkbox"/> PBDL crane <input type="checkbox"/> Weights calculated by PBDL <input type="checkbox"/> Sub-contractor crane required <input type="checkbox"/> Engineering required <input type="checkbox"/> Rigging supplied by crane <input type="checkbox"/> Near overhead hydro <input type="checkbox"/> Rigging supplied by PBDL <input type="checkbox"/> Other utility lines <input type="checkbox"/> Hoisting Plan required (critical lifts, hoisting over buildings, roads etc.)
Explain:	

Hazard Analysis Continued...

<u>Demolition Requirements</u>	<input type="checkbox"/> Engineering required	<input type="checkbox"/> Drywall	<input type="checkbox"/> Hoarding required
	<input type="checkbox"/> Building deconstruction	<input type="checkbox"/> Silica dust production	<input type="checkbox"/> Fencing required
	<input type="checkbox"/> Building collapse	<input type="checkbox"/> Nuisance dusts	<input type="checkbox"/> Signage required
	<input type="checkbox"/> Strip out		
	<input type="checkbox"/> Impacts to other structures/street possible		
	<input type="checkbox"/> Shoring required	<input type="checkbox"/> Tie backs required	
	<input type="checkbox"/> LOADING OUT: <input type="checkbox"/> trucks <input type="checkbox"/> bins <input type="checkbox"/> other		
Explain:			

<u>Electrical Supply and Hazards</u>	<input type="checkbox"/> None required	<input type="checkbox"/> Breaker location known	<input type="checkbox"/> Temporary panel req.
	<input type="checkbox"/> Site supplied by client	<input type="checkbox"/> Portable generator	<input type="checkbox"/> GFCI protection req.
Assured grounding colour: <input type="checkbox"/> red <input type="checkbox"/> white <input type="checkbox"/> blue <input type="checkbox"/> green			
Explain:			

<u>Excavation Hazards</u>	<input type="checkbox"/> None present	<input type="checkbox"/> BC 1-Call	<input type="checkbox"/> Permits required
	<input type="checkbox"/> Excavation required	<input type="checkbox"/> Hydro called	<input type="checkbox"/> Excavation left open
	<input type="checkbox"/> Shoring required	<input type="checkbox"/> Gas called	<input type="checkbox"/> Barricades required
	<input type="checkbox"/> Sloping	<input type="checkbox"/> More than 20' deep	
Explain:			

<u>Fall Protection Requirements</u>	<input type="checkbox"/> Not required	<input type="checkbox"/> Over 25' fall hazards (written plan req.)	<input type="checkbox"/> Engineered anchor points
	<input type="checkbox"/> Leading edges	<input type="checkbox"/> Control zones used	<input type="checkbox"/> Vertical lifeline
	<input type="checkbox"/> Floor openings	<input type="checkbox"/> Guardrails req.	<input type="checkbox"/> Horizontal Lifeline
	<input type="checkbox"/> Roof edges	<input type="checkbox"/> Known anchor points	<input type="checkbox"/> High angle rescue to be notified
	<input type="checkbox"/> Mobile work platforms	<input type="checkbox"/> Restraint (800 lbs)	
	<input type="checkbox"/> Crane supported work platforms	<input type="checkbox"/> Arrest (5,000 lbs)	
Explain:			

Hazard Analysis Continued...

<u>Fire & Hot Works Requirements</u>	<input type="checkbox"/> None anticipated	<input type="checkbox"/> Procedures required	<input type="checkbox"/> Backflow required
	<input type="checkbox"/> Hot work required	<input type="checkbox"/> City Hydrant water avail.	<input type="checkbox"/> Fire extinguishers required
	<input type="checkbox"/> Permits required	<input type="checkbox"/> Site hydrant avail	<input type="checkbox"/> Tanker truck required
	<input type="checkbox"/> Fire watch required (<input type="checkbox"/> 1/2 hr. <input type="checkbox"/> 1 hr. <input type="checkbox"/> hr's)		
Explain:			

<u>First-aid Requirements</u>	<input type="checkbox"/> Client provided	<input type="checkbox"/> PBDL provided	#of workers
	Overall workplace hazard rating	L <input type="checkbox"/> M <input type="checkbox"/> H <input type="checkbox"/>	
	Surface travel time to hospital	<input type="checkbox"/> Greater than twenty minutes	
		<input type="checkbox"/> Less than twenty minutes	
	Supplies: _____	Number and level of first aid attendants _____	
	Equipment: _____	Transportation needs _____	
	Facilities required _____		
Explain:			

<u>Indoor / Respirable Air Quality</u>	<input type="checkbox"/> No Concerns	<input type="checkbox"/> Hoarding
	<input type="checkbox"/> Silica Exposure	<input type="checkbox"/> Mech. Venting required
	<input type="checkbox"/> Equipment exhaust	<input type="checkbox"/> Exposure plan required
	<input type="checkbox"/> Fiberglass	<input type="checkbox"/> Ventilation plans required
	<input type="checkbox"/> Nuisance dusts	<input type="checkbox"/> Air testing required
		<input type="checkbox"/> Neg. air units required #____
		<input type="checkbox"/> Exhaust air filtered
Explain:		

<u>Lockout & Utility Isolation</u>	<input type="checkbox"/> Not required	<input type="checkbox"/> Gas	<input type="checkbox"/> Storm drains
	<input type="checkbox"/> Hydro	<input type="checkbox"/> Water	<input type="checkbox"/> Verification required
	<input type="checkbox"/> Telephone	<input type="checkbox"/> Sewer	<input type="checkbox"/> Blanking/blinding
	<input type="checkbox"/> Double block and Bleed permitted		
Explain:			

Hazard Analysis Continued...

<u>Lighting & Visibility</u>	<input type="checkbox"/> No concerns <input type="checkbox"/> Access & escape routes lit up <input type="checkbox"/> Flood lighting req.	<input type="checkbox"/> Power supply required <input type="checkbox"/> Generators required <input type="checkbox"/> Flashlights required
Explain:		

<u>Mobile Equipment</u>	<input type="checkbox"/> None used <input type="checkbox"/> Rentals used <input type="checkbox"/> Sub-contractor used <input type="checkbox"/> Excavators <input type="checkbox"/> Bobcats	<input type="checkbox"/> Forklifts <input type="checkbox"/> Mobile lifts <input type="checkbox"/> Scissor lifts <input type="checkbox"/> Cranes used <input type="checkbox"/> Compressors	<input type="checkbox"/> Generators watts <input type="checkbox"/> Boats <input type="checkbox"/> Equipment used on decks <input type="checkbox"/> Shoring req. <input type="checkbox"/> Engineering req.
Explain:			

<u>Noise & Temp. Requirements</u>	<input type="checkbox"/> No concerns <input type="checkbox"/> Noise <u>85+</u> dbA LEX <input type="checkbox"/> High noise hazards (planes, trains, blasting etc.)	<input type="checkbox"/> Standard plugs <input type="checkbox"/> Muffs <input type="checkbox"/> Plugs & Muffs
<input type="checkbox"/> High temp/ direct sun exposure (shielding, water or work procedures) <input type="checkbox"/> Cold temp Exposure. (Heating, hoarding or work procedures) <input type="checkbox"/> Work rest cycles needed <input type="checkbox"/> Worker temp/ Monitoring required <input type="checkbox"/> Botsball reading required		
Explain:		

<u>PPE Requirements</u>	<input type="checkbox"/> Standard equip. (Boots, hat, gloves, high visibility apparel, safety glasses) <input type="checkbox"/> Rubber boots <input type="checkbox"/> Rain gear <input type="checkbox"/> Fall protection <input type="checkbox"/> 1/2 mask respirator. – Cart. Type <input type="checkbox"/> Face shields <input type="checkbox"/> Life jacket <input type="checkbox"/> Knee pads
Explain:	

<u>Scaffolding / Work Platforms</u>	<input type="checkbox"/> None <input type="checkbox"/> Scaffolding	<input type="checkbox"/> Erection required <input type="checkbox"/> Swing stage
<input type="checkbox"/> Pre-use inspection by; <input type="checkbox"/> Installer <input type="checkbox"/> PBDL <input type="checkbox"/> Shift inspections required <input type="checkbox"/> Fall protection plan required <input type="checkbox"/> Rescue plan required <input type="checkbox"/> High angle rescue to be notified		
Explain:		

