	<b>DROPPED OBJECTS PREVENTION</b> ALL-HSE-PRC-5021	<b>Retention Code:</b> CG01 - CA
		<b>Revised:</b> <i>April 2015</i>
<b>Owner:</b> <i>BU and Functional Departments as applicable</i>	<b>Approved By:</b> Manager, Field	<b>Review Frequency:</b> At least every 5 years

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## **1.0 Purpose**

This Dropped Objects Prevention procedure describes the mitigation procedures to be used to prevent objects from dropping from heights harming workers or damaging equipment or facilities.

This Procedure applies as applicable to any Oil Sands site owned or operated by ConocoPhillips Canada Resources Corp. (CPC).

## **2.0 Hazards to Mitigate**

Hazards include, but are not limited to, the following:

- Objects dropped from heights.
- Faulty lifting or rigging equipment.
- Faulty securement devices (lashing, tool lanyards).
- Complacency while working at heights.

## **3.0 Procedure-Specific Roles and Responsibilities**

### **3.1. CPC**

- Manage and retain records as per this procedure for CPC activities.

### **3.2. Contractor**

- Manage and retain records as per this Procedure for Contractor activities, equipment and tools.
- Bridge equivalent Contractor document with this procedure as applicable.

### **3.3. Drilling Rig Contractor**

In addition to the above:

- Ensure preventive maintenance system includes a record of permanently installed overhead equipment. Indicate maintenance routines and frequency.

## **4.0 Procedures**

### **4.1. Hoist and Material Handling**

- Ensure there are no obstructions in the hoisting path.

Ensure material is in a secure location before untying and handling. To prevent objects from falling when hoisting:

- Select the appropriate rope for the task. See Fiber Rope Use procedure.
- Use canvas bags when hoisting small tools and materials.

- Inspect all hoisting equipment prior to use (e.g. gin wheels, pulleys etc.).
- Utilize mechanical means when possible.
- Maintain clear communication manual handling activities (e.g. passing scaffold components).
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- Do not throw objects from heights.
- Always ensure sufficient barricading. See Barricades and Temporary Hole Covers procedure.
- Ensure only required personnel are in the work area.
- Post signs outside of barricaded areas warning of overhead work in progress.
- Avoid working adjacent barricaded areas when practical.

#### **4.2. Housekeeping**

Good housekeeping prevents unnecessary objects from falling from heights.

- Only take necessary tools and equipped when working at heights.
- Remove trash and any materials or equipment no longer in use from the work platform as soon as possible.

See Housekeeping procedure.

#### **4.3. Tool and Material Control**

Plan work at heights to ensure tools and materials are controlled.

- Where practical use tool lanyards.
- Place small tools, screws, bolts etc. in canvas bags.
- Secure loose items at heights with proper lashing.
- Do not use altered tools.
- Inspect tools to ensure that they will not come apart during use (e.g. hammer heads).
- Secure tools in a pouch or tool belt.
- Secure bull pins or wedges to prevent falling if they get dislodged.
- Maintain adequate communication when passing tools and materials.

See Scaffolding procedure for material control specific to scaffolding.

#### **4.4. Equipment**

- Equip non-integral equipment and fixtures susceptible to impact/metal fatigue/corrosion with a suitable secondary retention method.
- When practical equip all electrical, hydraulic, pneumatic and circulation hoses/lines etc. with safety lines at both ends.
- Inspect such lines and hoses weekly or as per preventive maintenance procedure.

#### **4.5. Drilling Rig Specifics**

- While nipping up/down or working on blowout prevention (BOP) from scaffolding or an elevated area, guard the blowout preventer (BOP) area against worker access with barrier tape or chain (drilling).
- Obtain permission of the driller to ascend into the mast.
- While tripping pipe, clean gumbo from tool joints and bottom hole assembly (BHA) components before hoisting them above the drill floor and setting back.
- Compile and maintain inventories of all non-integral installations and fixtures attached to the mast structure and drilling unit substructure for each section. See Appendix D for illustration of mast sections and levels.
- Prior to raising the mast, perform a thorough Dropped Objects inspection of mast sections and the drilling unit substructure. See Appendix E for suggested inventory format.
- Repeat dropped objects inspections of the mast after operations that have created excessive vibrations or shock loading of mast structure, such as jarring stuck pipe.
- Conduct a thorough dropped objects inspection of the mast and substructure 30 days after raising the mast and on a monthly basis thereafter, until the mast is lowered.
- Use mast section inventories of non-integral installations and fixtures as checklists for Dropped Objects inspections.
- Inspect thoroughly the sheaves before the time the mast is raised (drilling).
- Consider anti-load drop lines for sheaves and lines installed in the mast, such as air hoist sheaves or counterweight sheaves (drilling).

See Appendix C for a listing of equipment and activities that may cause Dropped Objects incidents. Consider this when preparing inventories, job safety analyses and pre-job safety meetings.

#### **5.0 References**

Fall Protection procedure ALL-HSE-PRC-188.

Personal Protective Equipment ALL-HSE-SPC 643.

Preventive Maintenance procedure OLS-HSE-PRC-5042.

Scaffolding procedure OLS-HSE-PRC-5004.

Hand Tools and Portable Power Tools procedure OLS-HSE-PRC-5005.

Barricades and Temporary Hole Covers OLS-HSE-PRC-5009.

Elevated Work Platforms OLS-HSE-PRC-5012.

Portable Ladders OLS-HSE-PRC-5006.

Fibre Rope Use procedure OLS-HSE-PRC-5028.

Housekeeping procedure OLS-HSE-PRC-5040.

Preventive Maintenance procedure OLS-HSE-PRC-5042.

## 6.0 Document Retention

Records must be retained in accordance with the ConocoPhillips Document Retention Schedule.

Record	Owner	Classification	Retention
Dropped Object Inventories	BUs and Functional Departments as applicable	CG01 - CA	E + 2 years
Inspections	BUs and Functional Departments as applicable	CG01 - CA	E + 2 years

Note: Contractors must retain procedure specific records.

## Appendix A – Acronyms

<b>BHA</b>	Bottom Hole Assembly
<b>BOP</b>	Blow-out prevention

## Appendix B – Definitions

<b>Mast</b>	Long projecting beam or girder fixed at only one end, used chiefly in bridge construction.
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### Appendix C – General Sources of Dropped Objects Incidents

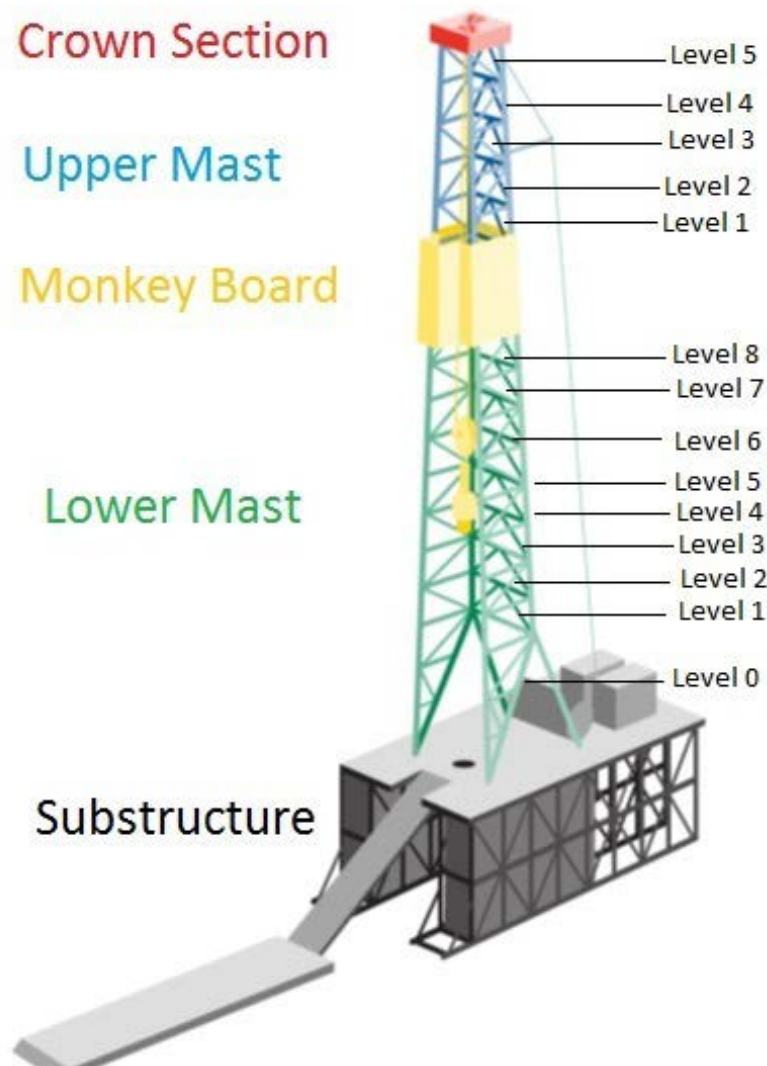
This is a non-exhaustive, general listing of equipment/ tools parts that may create a high risk for Dropped Objects incidents.

Suspended loads	Sheaves / Snatchblocks
Cementing heads	Pipe guards / fingers
Cable trays	Monkey board extensions
Installations and fixtures	Water table
Loose parts (e.g. bolts and nuts)	Blowout preventers
Hand tools	Derrick / Mast
Power tools	Drill floor
Scaffolding	Substructure
Line failure	Wire line / Electric logging
Loose objects on loads	Lubricator
Catwalks	Logging tools hoisted overhead
Winches	Wind walls
Grating, handrails and stairways	Casing thread protectors
Tanks	Casing joints
Rooftops/Ceilings	Drill pipe stands (dropped across mast)
Shelving/Storage	Objects near V-door/catwalk
Temporary piping	Travelling assemblies (collision)
Speakers	



### Appendix D – Illustration of Mast Sections and Levels

Use the drawing below as a guideline for developing Dropped Objects inventories for a drilling unit. Enter each potential Dropped Object into the inventory/checklist with a description of the mast section in which it resides. In the cases of the upper and lower derrick sections, include the level at which the Dropped Object is located.



**Appendix E – Example Inventory/Inspection Checklist**

Item #	Item Description	Level	Securing Method	Date Checked	Comments
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					

Inspector \_\_\_\_\_ Date \_\_\_\_\_

## Appendix F – Sample Temporary Equipment Register

Item #	Item Description	Securing Method	Company	Date Installed	Installed by Name / Company	Date Removed
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						

**Appendix G – Revision Record**

Page#		Previous Information	Risk Assessment