



De Beers Canada Inc. – Exploration Division

RCD 062 – HERITAGE AND ARCHAEOLOGICAL SITE INFORMATION SHEET

BORDEN NUMBER (BN) _____

UPPER BORDEN (UB) _____

LOWER BORDEN (LB) _____

SEQUENCE NO. (SN) _____

SITE NAME (NAM) _____

REPORT NO. (RN) _____

CONTRACT NO. (CN) _____

PERMIT NO. (PN) _____

PROJECT (PRO) _____

ERRORS (ER) Nature of Error _____

Action Taken: _____

LOCATION (LOC) _____

TERRITORY (TER) _____

DISTRICT (DST) _____

MAP REFERENCE(MR) _____

JURISDICTION (JUR) Federal _____

Federal - PARKSCAN _____

Provincial _____

LAT. (LAT) _____

LONG. (LNG) _____

UTM _____

E _____

N _____

AIR PHOTO (AIR) _____

ELEVATION (EL) _____

SIZE (SIZ) _____

CONDITION (CON) _____

SITE TYPE CLASS (TYC) _____

prehistoric _____

indigenous historic _____

historic _____

contemporary _____

natural _____

undetermined _____

SITE FEATURES (FE) _____

SITE TYPE (TY) _____

CULTURE (CU) _____

DATES (DATE) _____

RESEARCHER (RES) _____

YEAR OBSERVED (OD) _____

year _____

collector _____

permanent repository _____

COLLECTIONS (COL) _____

PUBLISHED REFERENCES (PRE) _____

UNPUBLISHED REFERENCES (UPRE) ASC ARCHIVES Ms. _____ ; _____ ; _____ ; _____

REMARKS (RE): _____

Prepared by: M. Pickard

Approved By: M. Pickard

Date issued: 20 June 2001

Form No.: RCD 062

Revision No: 02

Date of Revision: 7 November 2005

Site Sketch on Reverse

De Beers Canada Inc. Exploration Division
OP 018 – Abandonment of Exploration Activity

1. Purpose and Scope

These operating procedures provide direction for the protection of the environment during day-to-day operations undertaken on a routine basis during exploration by De Beers Canada Inc. – Exploration Division (DBCE), and specifically discuss procedures for abandonment of exploration activities.

2. Responsibilities

- Responsible Person

3. Procedures

- 3.1. Local, regional, provincial and federal regulations shall be referenced to establish whether specific activities are required prior to abandoning exploration sites. The Responsible Person shall ensure that the appropriate measures are taken with respect to regulatory requirements, in particular with respect to culverts, water crossings and work near or around waterways.
- 3.2. A number of activities are required to ensure exploration sites are returned to as natural a state as possible. The activities required will vary depending on site conditions and local, regional, provincial and territorial requirements. The following activities will be carried out, as a minimum (Refer to the Camp Close Out Checklist - CL 034 and Drill Hole Closure Checklist – CL 033):
 - Out-slope and remove all berms from roads no longer required, and install appropriate water barriers and other erosion control structures.
 - Remove culverts, low bridges and other structures, which may cause blockage or unwanted diversion of watercourses.
 - Backfill and grade all open excavations such as the exploration trenches, adits, and shaft waste dumps as close to the original contour as possible. Grade to contour or smooth out drill sites, building sites, roads or other major disturbances resulting from construction during the exploration programme.
 - Close, or otherwise make safe from unauthorised entry, all tunnels, shafts, and other openings.

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De Beers Canada Inc. Exploration Division
OP 018 – Abandonment of Exploration Activity

- Refer to “OP 017 – Environmental Protection Measures for Surface Drilling Programs” for specific requirements regarding Drill Hole close-out.
- Set up a routine for any post-closure inspection and testing procedures that may be required as part of a closure plan.
- Remove all trash and other foreign material from the exploration area, in accordance with the DBCE Waste Management Procedure (OP 022).
- Wherever practical, scarify compacted areas where roads or buildings have been to encourage re-vegetation.
- Where possible and during appropriate seasons, revegetate all disturbed areas by planting with indigenous trees and/or vegetation suitable for the area. In addition, or as an alternative, prepare the disturbed surfaces in a way that will encourage natural revegetation.
- Repair, replace or remove security gates and fences as appropriate.
- When finally abandoning exploration sites in claim staked areas close to settled areas, remove any physical evidence of work such as non-biodegradable flagging ribbons or pickets. Be aware that most jurisdictions do not allow staking posts or survey monuments to be removed.
- Advise interested parties (internal and external) that the site has been abandoned, in accordance with the procedure for Communication (PROC 4.4.3 SYS)

4. References

- 4.1.1. Waste Management Procedure (OP 022)
- 4.1.2. Environmental Protection Measures for Surface Drilling Programs (OP 017)
- 4.1.3. Communication (PROC 4.4.3 SYS)
- 4.1.4. Camp Close Out Checklist (CL 034)
- 4.1.5. Drill Hole Closure Checklist (CL 033)

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**OP 017 – ENVIRONMENTAL PROTECTION MEASURES FOR SURFACE
DRILLING PROGRAMS****3.3. Access to Drill Sites**

- 3.3.1. The Responsible person, or delegate, will refer to the procedure for Road Building and Access (OP-010) where road building and access is required for surface drilling operations.
- 3.3.2. The Responsible Person, or delegate, will ensure that drill sites and water lines will be located in areas where access to them and their operation will create the least amount of disturbance. Wherever possible, the local landform and vegetation is to be utilized to visually screen drilling activities.

3.4. Waste Management

- 3.4.1. The Responsible Person, or delegate, will ensure that the drilling company provides and utilizes appropriate receptacles for debris at drill sites and that waste is removed and disposed of, in accordance with DBCE Waste Disposal Procedure (OP-022) and Recycling Procedure (OP 026), throughout the drilling operation and as a part of drill site demobilization.
- 3.4.2. The Responsible Person, or delegate, will ensure that drilling companies do not permit drilling wastes to run uncontrolled over land or ice surfaces or into watercourses. Drilling companies will recycle as much drilling mud and water as possible by using tanks and sumps, as appropriate. The Responsible Person, or delegate, will ensure that this requirement is communicated as required, and that DBCE's procedure for the Management of Processed Kimberlite (OP 023) is adhered to.
- 3.4.3. Drilling Companies will provide, when requested, a written record of all drill additives and chemicals in use by the driller to the Responsible Person. The records shall include the additive name and the details of those holes in which the additive was used.
- 3.4.4. The Drilling Contractor may provide a report of how drill cuttings and drill mud are disposed of in the final project report. The Responsible Person,

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DRILLING PROGRAMS**

or delegate, shall ensure that drill mud is disposed of appropriately, as verified in the final inspection of the drill site (See section 3.8 below)

- 3.4.5. The use of biodegradable materials is encouraged, for minimizing waste disposal requirements and possible environmental damage.

3.5. Water Management

- 3.5.1. The use and management of water at surface drilling operations shall be in accordance with the operating procedure for Use and Handling of Water (OP 028).
- 3.5.2. The Responsible Person, or delegate, will ensure that all applicable legislation is reviewed and applied for water taking (water taking permits) for drilling operations.
- 3.5.3. Water consumption will be minimized, as appropriate, by the drilling company. Water shall not be left running when water lines are not in use or when water is not required for maintenance or operation of the drill equipment. The installation and use of shut-off valves, where appropriate, is required.

3.6. Fuel Handling

- 3.6.1. Drilling companies will adhere to DBCE procedures for fuel handling (OP 030) when managing petroleum products on drill sites.
- 3.6.2. All uncontrolled grass and weeds (i.e. all long grass and weeds) are to be trimmed back for a minimum of 6 metres from all fuel storage areas.
- 3.6.3. Fire suppression equipment shall be kept at all petroleum product storage sites.
- 3.6.4. All storage areas are to be a minimum of 50 metres away from any body of water unless regulations state a greater distance. On occasions where fuel can't be stored 50 metres away the Responsible Person must put in place spill containment (i.e. tarp and berm).

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- 3.6.5. Jerry cans, metal containers and other temporary storage canisters for petroleum products must be clearly labelled indicating the content of each container in accordance with the appropriate WHMIS regulations and the Hazardous Materials Safety Procedure (OP 067).

3.7. Emergency Response

- 3.7.1. Drilling companies will ensure that appropriate spill kits, oil-absorbent material and/or oil booms are on site and available for use in the event of a spill. The Responsible Person, or delegate, will ensure spill clean-up materials are on site during part of routine site inspections.
- 3.7.2. Drilling companies will either adhere to DBCE's Emergency Response Procedures (OP 036), including spill response (OP-031) or develop and implement their own specific Emergency Response Procedures in accordance with DBCE's requirements.

3.8. Drill Site Close-out

- 3.8.1. Drilling companies will closeout drill holes as required by applicable regional, provincial, territorial or federal legislation.
- 3.8.2. Where no regional/provincial or territorial legislation applies in respect to closing out drill holes, of the procedure for the following actions are required (the Drill hole Closure Checklist CL - 033 and Closure of Drill Site - CL 015):
- Drill casings will be removed, where possible
 - Where casing removal is not possible, the casing shall be cut close to the ground and the hole capped.
 - Holes will be backfilled with excess drill cuttings, suitable plug(s) or cap(s) with at least two metres of cuttings, cement or bentonite.
- 3.8.3. The Drilling Company shall ensure that any stains on ice or soil, caused by their activities are reported, handled, removed and disposed of in accordance with DBCE Waste Disposal Procedures (OP-022) and Spills

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Response Procedure (OP-031). The Responsible Person shall include visual inspections for ice, snow and soil staining as per section 3.8.4 below.

3.8.4. Prior to releasing a Drilling Company from a drill site, and/or upon the completion of each hole, the Responsible Person, or delegate, shall inspect each drill site to ensure that:

- The drill hole has been plugged where necessary;
- Casing has been pulled or cut off at ground level;
- The site has been properly cleaned up, including all soil, ice and snow staining having been removed, as per above.
- Waste has been disposed of appropriately, as described above as per CL 015.

3.8.5. The Responsible Person has the authority to re-call a Drilling Company to a drill site to remedy any deficiencies identified in the final site inspection. The Drilling Company will adhere to the directions provided by the Responsible Person with respect to environmental clean-up actions required.

4. References

- 4.1. Noise and Air Emissions procedure (OP 040)
- 4.2. Road Building and Access procedure (OP 010)
- 4.3. Use and Handling of Water procedure (OP 028)
- 4.4. Petroleum Product Handling procedure (OP 030)
- 4.5. Emergency Response (OP 036)
- 4.6. Waste management procedure (OP 022)
- 4.7. Spills Response procedure (OP 031)

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- 4.8. Boiler Plate Clause – Drilling (RCD 006b)
- 4.9. Hazardous Materials Safety – WHMIS (OP 067)
- 4.10. Management of Processed Kimberlite (OP 023)
- 4.11. Closure of Drill Site Checklist (CL 015)
- 4.12. Checklist for Drill Hole Closure (CL 033)

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1. Purpose and Scope

This operating procedure provides direction for the protection of the environment during surface drilling programs within all De Beers Canada Inc. – Exploration Division (DBCE) projects and operations.

2. Responsibilities

- Responsible person
- Drilling Companies

3. Procedures

3.1. Contractual Responsibilities

- 3.1.1. The Responsible Person, or delegate, will ensure that all contracts for drilling contain, at a minimum, the necessary clauses, as outlined in the document Boiler Plate Clause – Drilling (RCD 006b), developed to protect the environment during surface drilling programs.
- 3.1.2. The Responsible Person, or delegate, will clearly define all environmental duties and liabilities of the contractor in the contractor's agreements or contracts.
- 3.1.3. The Responsible Person, or delegate, shall ensure that drilling company workers under contract are aware of current applicable environmental regulations and procedures, and are committed to comply with these in the course of their work. This commitment will form part of the contractual agreement signed by the drilling company.

3.2. Noise and Air Emissions

- 3.2.1. Drilling operations will endeavour to keep to a minimum any noise produced by equipment. The Responsible Person, or delegate, will ensure that this requirement is communicated to drilling operators as required, and that DBCE's procedure for Noise and Air Emissions is adhered to (OP-040).

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