| STANDARD OPERATING PROCEDURE | | | |
|--|-----------------------------------|-------------------------------|--|
| LIGHT BURN BARREL TO THAW MATERIAL OUT OF EXCAVATOR BUCKET | | Document Number: 962C-SOP-005 | |
| Original Approval Date: July 13, 2012 | Revision Number: 3 | Page 1 of 4 | |
| Latest Revision Date: June 15, 2022 | Next Revision Date: June 15, 2025 | Document Approval Level: 4 | |

^{*}This document is not controlled if printed.*

LIGHT BURN BARREL TO THAW MATERIAL OUT OF EXCAVATOR BUCKET

| R | ev | Status | Rev. Date | Status Description | Prepared by | Reviewed by | Approved by |
|---|----|--------|---------------|--------------------|-----------------------------|-------------|--------------|
| | 1 | APP | Jul 13, 2012 | Approved | Doran Kunz & Dean Jowsey | | Barry Palmer |
| | 2 | APP | Aug 8 2018 | Approved | Aimee Letendre | Tammy Siver | Barry Palmer |
| | 3 | APP | June 15, 2022 | Approved | L. Norris | L. Norris | T. Siver |



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The following is a step by step procedure on how to complete a specific task or meet a facility specific requirement. Standard Operating Procedures (SOPs) are written for all identified critical tasks. By virtue of the hazard or complexity associated with critical tasks it is paramount that the SOP be followed as written. SOPs contain a listing of high-level hazards associated with the task, for detailed hazard analysis reference the applicable Task Hazard Assessments. SOPs do not replace the requirements contained in the company Standards, Codes, and Processes nor does it replace the need to comply with required legislation. Section 8.0 references documentation that the worker shall understand before work commences.

1.0 PURPOSE

 To establish a company standard to safely and effectively carry out work as it applies to potential hazards when an open flame burning barrel is used to thaw material in an excavator bucket.

2.0 SCOPE AND APPLICATION

• This document applies to all company Heavy Construction Mining operations. Ensure all site specific requirements are being met or exceeded before performing the task.

3.0 HAZARDS AND CONTROLS

- Barrel/Hydrocarbon ignition causing personal injury, equipment, and environmental damage.
 - Fully charged 20 pound ABC Extinguisher on hand.
 - Place extinguisher in appropriate location for quick access (Within 5 meters, no closer than 2 meters, upwind).
 - Before placing bucket over flames check for excess grease or hydraulic leaks.
 - Contact <u>MUST BE MADE</u> to Regional Fire Department / Site emergency services prior to ignition, as appropriate by site (A fire permit may need to be obtained from the regional fire department if burning off of a private work site).
- Diesel spill causing personal injury or environmental damage.
 - Select stable even ground to place barrel before starting work.
 - Use only drum in good condition, no puncture holes in bottom of drum.
- Personal injury.
 - Ensure barrel is cool before handling.
 - Position body in a manner that will not cause discomfort while applying diesel in the drum.

Select stable even ground to place barrel before starting work.



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- Tight fitting clothing free of hydrocarbon residue.
- Use only experienced personnel to prepare drum for ignition.
- Be aware of ground conditions in the immediate work area.
- Fire suppression discharge.
 - Check with maintenance to confirm if activity will activate fire suppression system, keep bucket away from IR (infrared) detectors.
- Other equipment or workers in the area.
 - Hot work permit must be obtained (if applicable on your site).
 - Keep equipment at a safe distance until barrel is lit and ready to be used.
 - Only personnel directly involved will be in work area.
 - Pylons or barriers must be placed around the barrel to warn other workers of the hazard when not in use.

4.0 CHECKLIST

| | Standard of Training required for working on this job: On-the job training. |
|---|--|
| | Conduct a pre-job inspection of all equipment to be worked on and tools to be used. |
| | identified in the SOP's; JSA's; and FLRA's |
| | Ensure all personnel involved in the task are aware of the hazards and the controls to be used, as |
| _ | Complete FLRA cards before starting the work. |
| | Attend all preparatory meetings (IE: daily PSI; job scope; review of JSA's and SOP's for the job) |

5.0 DEFINITIONS

5.1 Company

Means North American Construction Group Ltd. (NACG) and all directly or indirectly owned subsidiary companies, including joint ventures.

5.2 Company Personnel

Includes the Company's employees, officers, directors, agents, associates, consultants/contractors, temporary employees, and third-party processors.

5.3 HSE

Refers to the Health, Safety & Environment department



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6.0 PROCEDURE

- 1) Supervisor identifies the need for conducting the procedure and informs required workers of their role.
- 2) Checklist items are completed by each crew member.
- 3) Area for burning is selected.
- 4) A "Hot Work Permit" must be obtained.
- 5) Contact <u>MUST BE MADE</u> to the appropriate site emergency services or regional fire department prior to ignition (A fire permit may need to be obtained from the regional fire department if burning off of a private work site).
- 6) Area is barricaded and/or warning signs erected.
- 7) Place extinguisher in appropriate location for quick access (Within 5 meters, no closer than 2 meters, upwind).
- 8) Prepare the barrel.
- 9) Ignite the barrel.
- 10) Excavator moves into position:
 - Before placing bucket over flames check for excess grease or hydraulic leaks, clean as required.
 - Using the maximum arm length of the excavator, position the bucket so that the bucket can shield the Infrared Fire Eye on the excavator.
- 11) When bucket is sufficiently warmed, the excavator is reversed, and material removed.
- 12) Let barrel burn out insuring that hydrocarbons are spent.
- 13) Move cooled burn barrel to a safe location, erect barriers or warning devices as required.

7.0 NOTES

If this task is to be done by a method different than described in this SOP, the work must **STOP** and the alternate method must be **DOCUMENTED** with an adequate hazard assessment tool such as a JSA. The document must be **APPROVED** by a supervisor before such procedures are implemented.

8.0 REFERENCES

Alberta Occupational Health and Safety Act, Regulation and Code – {Part 2}

9.0 APPENDICES

No Appendices.

