SOP Number	**008-PL**	
SOP Title	**Setting and Launching Pigs**	

	NAME	TITLE	SIGNATURE	DATE
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008			**0**	

1.   PURPOSE

- This procedure is a guideline on the proper way to safely perform pipeline pigging activities. Employees at BBGCI will use this as a guide to help them perform their duty in a safe and productive manner.

- BBGCI will be in compliance with all government regulations as well as the regulations set forth by our clients.

2.   INTRODUCTION

- BBGCI understands that all jobs are different. This SOP is set in place as a guideline to help employees understand the proper procedure to follow when executing any pigging operations. Dirt, dust, rocks and other debris build up inside of the pipe while in the construction phase as well as backfilling the dirt on top of the new line. By pressurizing these pigs and sending them down the line, this helps with cleaning out all the unwanted debris and waste. This procedure may have to be repeated multiple times until the line is fully cleaned and cleared for product to be introduced.

3.   SCOPE

- This procedure has been set in place for BBGCI equipment operators and support personnel who will be conducting pipeline pigging operations.

4.   DEFINITIONS

- <u>Pipeline Pig</u> - capsule shaped objects which travel through the pipeline, cleaning the inner walls of the pipeline using a brushing action.

- *<u>Pig Launcher</u> - a vessel used for launching the pig into a pipeline by creating a pressure differential within in the pipe being cleaned.*

- *<u>Pig Receiver</u> – a vessel use to receive the pig on the other end of the pipeline.*

- *<u>Line of Fire</u> -* The path of a moving object that can potentially injure or the potential path of an object that may move.

- *<u>Buffer Zone</u>* - The area where operation occurs, that is deemed not safe for unauthorized personnel or equipment.

5.   RESPONSIBILITIES

<u>Supporting Personnel</u>

1. Participate in tailgate meeting and JSEA.

2. Understand the scope of work and the hazards involved in his/her specific job duty.

6.   SPECIFIC PROCEDURE

<u>Documentation and Prior to Work Procedures</u>

(Personnel Involved: Foremen and Supporting Personnel)

1. Before work can commence, properly complete all JSEA's, work permits, safety tailgate meetings, and equipment inspections.
2. Equipment inspections will be completed by qualified personnel.
3. Establish the scope of work, and ensure everyone knows their specific job duty.
4. Spotter/Supporting Personnel will maintain a safe buffer zone and inform the operator that it is safe for work to commence.

Valve Restrictions for pig launcher

1. Ensure that the manual launcher valves are all closed
2. Check that the vent valve and globe valve, valves between the launcher valves, are closed.
3. Check that the globe valve and vent valve on the launcher are closed.
4. Check that the integral double block valves and globe valve are closed
5. Check that the appropriate drain valves on the launcher are closed.
6. Inform all involved personnel that a pig is about to be launched.

Valve Restrictions for Pig Receiver

1. Check that the appropriate drain valves and vent valves on the receiver are closed.
2. Check that the drain valves between the receiver valves are all closed.
3. Check that the globe valve and double block valves are closed.
4. Check that the valve on the bypass line is opened.
5. Check that the receiver valves are closed.

Launch Prep

1. Open the globe valve and the double block valves in the receiver kicker line.
2. Open the receiver valves.
3. Close the valve on the bypass line.

Launching the Pig

1. Open the appropriate globe and vent valves on the launcher. Check that the pressure gauges on the launcher barrel are indicating zero pressure.
2. Open the appropriate valves between the launcher valves. Check that the pressure gauge between the launcher valves is also zero.
3. Open the launcher door.
4. Place the pig into the launcher barrel and push it as far forward as possible.
5. Close the launcher door.

6. Close all the appropriate valves.

7. Pressurize the launcher barrel by opening the integral double block valves and gradually open the globe valve in the "kicker line". Once the launcher is at the same pressure as the export pipeline, close the necessary valves.

8. Open the launcher valves downstream from the launcher.

9. By closing the launcher bypass valves, this will launch the pig into the export line.

Receiving the Pig

1. Once the pig has arrived in the receiver, open the appropriate valve to bleed off the pressure from the line.

2. Once the pressure gauges are showing that the receiver is completely depressurized, open the drain valves from the launcher to drain the system.

3. Open the vlave on the barrel end vent line to confirm that the receiver is fully depressurized.

4. Open the door on the receiver and retrieve the pig from the barrel.

5. Close and secure the receiver door.

6. Repeat this process as many times as need to clean the line out.

7. JOB RELATED HAZARDS

Slips, Trips and Fall Hazards:

- Inspecting Equipment

- Climbing on and off equipment

- Walking on uneven surface or rocks

- Working near open hole/trenches

Pinch Points and Line of Fire Hazards:

- Moving Equipment

- Walking in unauthorized work areas/buffer zones

- Working with pressurized lines

- Working on the exiting end of the pipeline pig

- Vehicles next to roadway

8.   REQUIRED PPE

- Hard hat
- Safety Glasses
- Steel Toe Boots
- Gloves
- Fire Resistant Clothing (FRC's)
- Reflective Vest (When working next to roadway)
- Personal Gas Monitors (Site Specific)

<mark>9.   FORMS/TEMPLATES TO BE USED</mark>

- JSEA
- Work Permits (If Required)
- Client Required Forms

10.   INTERNAL AND EXTERNAL REFERENCES

10.1   Internal References

10.2   External References

11.   CHANGE HISTORY