

	Environmental Analysis Teaching and Research Laboratory	Date: 8/11/2016	Number: 04
	Standard Operating Procedure	Title: Electrical Power in the Field	
	Approved By: Los Huertos	Revision Date: August 7, 2016	

1. Scope and Application

- 1.1 Electrical power can come from infrastructure sources, such as outdoor or indoor outlets, portable generators, or solar power.
- 1.2 This documents outlines some of the risks associated with electricity in the field
- 1.3 We develop strategies to mitigate these risks.

2. Health and Safety

- 2.1 Getting electricity in the field has risks, thus it's important to develop mitigation plans
- 2.2 Always read and follow the manufacturer's operating instructions before running generator
- 2.3 Engines emit carbon monoxide. Never use a generator inside your home, garage, crawl space, or other enclosed areas. Fatal fumes can build up, that neither a fan nor open doors and windows can provide enough fresh air.
- 2.4 Only use the generator outdoors, away from open windows, vents, or doors.
- 2.5 Use a battery-powered carbon monoxide detector in the area you're running a generator.
- 2.6 Gasoline and its vapors are extremely flammable. Allow the generator engine to cool at least 2 minutes before refueling and always use fresh gasoline.
- 2.7 Maintain your generator according to the manufacturer's maintenance schedule for peak performance and safety.
- 2.8 Never operate the generator near combustible materials.
- 2.9 If you have to use extension cords, be sure they are of the grounded type and are rated for the application. Coiled cords can get extremely hot; always uncoil cords and lay them in flat open locations.
- 2.10 Never plug your generator directly into your home outlet. If you are connecting a generator into your home electrical system, have a qualified electrician install a Power Transfer Switch.

2.11 Generators produce powerful voltage, ensure that the cables plugged into the generator are rated with the capacity to carry the current without generating excessive heat. Never leave the cables coiled, because they can generate more heat when touching.

2.12 Never operate under wet conditions. Take precautions to protect the generator from exposure to rain and snow.

3. Personnel & Training Responsibilities

3.1 Before using the generator, researchers must be read and understand how to operate the Honda 2000IE or Ryoko XXXX? generators.

3.2 In addition, researchers using generators shall be trained for the following SOP(s):

- SOP 03 Field Safety

4. Required Materials

4.1 Honda 2000XX or Ryoka XXXX generators

4.2 High capacity extension cords (rated for $XX \geq$ Amps)

4.3 Spare gas container with ethanol-free gas

4.4 Oil

5. Estimated Time

5.1 This will take XX minutes...

6. Procedure

6.1 Check oil level. If low...

6.2 Check gas level. If low...

6.3 For Honda...

6.4 For Royoka...

6.5 Adding fuel...

6.6 If you do not plan to use the generator in 30 days, use fuel stabilizer with gas and drain carburetor.

7. References

7.1 asdfasd asdfasdf