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To Whom It May Concern

**SUBJECT: Jaime Dantas' Contribution To Air Emissions Trial at the OPG  
BioEnergy Learning & Research Centre**

Hello, I am Karry Anne Campbell. I am a Policy Analyst – Forest Economy with the Ontario Ministry of Natural Resources and Forestry (MNR). I am a Professional Forest Engineer with previous wood products manufacturing management and quality control experience. I am the project lead for an air emissions trial which was a joint effort between Confederation College's OPG BioEnergy Learning & Research Centre (BLRC), Natural Resources Canada, Ontario Ministry of the Environment and Climate Change and the MNR. This research was gathering information pertaining to wood fuel characteristics, combustion/gasification technology and air emission performance indicators. This research is being used to inform the development of a new interim guidance document for Environmental Compliance Approval permits in Ontario.

I had the pleasure of working with Jaime Dantas while he was a Research Assistant at the BLRC. Jaime was given full responsibility of the fuel sample collection aspects of the research. The BLRC had been delayed with equipment commissioning and this research project was the first one to be conducted at the BLRC. As such, all of the standard operating procedures, data forms and training materials were being prepared and utilized for the first time. Jaime demonstrated excellent initiative and creativity in the development and editing of the standard operating procedures. He practiced the test methods with the draft versions and improved them with labeled graphics so that they were better training tools. He modified the sample collection equipment to improve the ease of collection and prevent loss of material that would impact on the tracked data. Jaime also implemented a series of equipment labels to improve control over chain of custody for the collected samples. Jaime developed the data collection forms to support both manual recording and digital record collection.

To support the 15 day trial period, Jaime recruited, trained, scheduled and supervised 14 student volunteers from Confederation College. The student training started with a site safety orientation and provision of personal protective equipment. The students worked in small groups for a few three hour periods during the trial. Jaime did an excellent job in training the students on how to conduct the sample collection and additional tests. He provided information on the importance of the small aspects of the standard operating procedures that ensured chain of custody. He reviewed the student work and increased their empowerment to work with less supervision as they

demonstrated the required level of understanding and attention to detail. He also arranged for the students to be able to interact with the technical experts that were contributing to the research so that the students would have an opportunity to understand the bigger picture of why the research was being conducted and opportunities for improving the business and policy environment for biomass heating in Ontario.

In addition to fuel sample collection, Jaime was responsible for establishing the BLRC's tools, calibrations, data sheets and standard operating procedures for the following tests that were completed on site: Oven Dry Moisture Content; Bulk Density; and Wood Chip Classifier. During each trial day Jaime managed the flow of work and ensured that the required numbers of tests were conducted. He also identified opportunities for additional tests to be completed providing extra value to the research program.

During the equipment commissioning stage before the trial began, Jaime utilized his engineering and programming skills to help commission the weigh scale system that measures and records the fuel feed rate to one of the boilers. Jaime worked with two different equipment providers to confirm calibration methods and data recording. He helped develop the standard operating procedures and log book for changing the fuel bin associated with the weigh scale. During the trial period we experienced problems with the automatic recording of the weigh scale data. Jaime identified the problem and set up manual data recording to allow the trial testing to continue without interruption. Jaime worked with the equipment suppliers remotely to trouble shoot the root cause of the problem and make the long term fixes to prevent reoccurrence of the issue. After the data collection was completed Jaime also compiled the auto and manually recorded data, the fuel bin log book and the sample collection weights to make a corrected summary of actual fuel use that can be paired up with the other research data.

During the first 10 days of the trial, I work directly with Jaime. He is a lovely person to work with. Jaime is patient, considerate, observant and dedicated. His time management skills were proven during the research and he requested help when it was required. When I left the BLRC while there were still 5 days of active testing, and I was confident that Jaime would successfully complete all of the required work. Jaime also took a lead role in producing the resulting trial report and doing quality control and organization of the data sets. Jaime's contribution to the BLRC is helping with updating public policy in Ontario for biomass heating. He greatly exceeded my expectations and I am confident that Jaime will be successful and a great asset to any future employer.

Sincerely,



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