



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

October 5, 2010

Stephen McCommon
Chief Financial Officer
CDEX Inc.
4555 South Palo Verde Road, Suite 125
Tucson, AZ 85714

Re: CDEX Inc.
Preliminary Proxy Statement on Schedule 14A
Filed September 20, 2010
File No. 000-49845

Dear Mr. McCommon:

We have limited our review of your filing to the issues we have addressed in our comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Election of Directors, page 2

1. Given the Form 8-K filed on September 1, 2010 regarding the resignation and appointment of your officers and directors, please expand to provide the disclosures by Item 6(e) of Schedule 14A. Also ask the newly appointed officers and directors to tell us when they intend to file the reports required by Section 16 of the Exchange Act and the reasons for the reduced number of shares they hold, as reported in the table on page 6.

Certain Transactions, page 10

2. We refer to the Item 1.01 disclosure in your Form 8-K filing dated September 1, 2010, including your disclosure that board member Thomas Payne is a signatory to an Exclusive Distribution Agreement with you. Please revise your proxy to disclose the information required by Item 404 of Regulation S-K with respect to that transaction.

Proposal No. 3, page 12

3. We refer to your response to the second bullet point of prior comment 3 and your revised disclosure in the table at the top of page 16. Please tell us why you do not list any shares in the second column for Gemini Master Fund and Malcolm Phillips. Also, if you intend to issue the additional shares that are the subject of this proposal to affiliates, such as pursuant to the "Incentive Plan" noted on page 13 and quarterly stock grants and warrants mentioned in the exhibit to the Form 8-K filed September 1, 2010, please revise to make the interest of your affiliates clear. See Item 5 of Schedule 14A.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Joseph McCann at (202) 551-6262 or Geoffrey Kruczek, Senior Attorney, at (202) 551-3641 with any questions.

Sincerely,

Russell Mancuso
Branch Chief

cc (via fax): J. Anthony Rolfe, Esq. – Chachas Law Group P.C.