



DIVISION OF
CORPORATION FINANCE

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

January 6, 2011

Mr. Gil Boosidan
Chief Executive Officer
Suspect Detection Systems, Inc.
150 West 56th Street, Suite 4005
New York, NY 10019

Re: Suspect Detection Systems, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2009
Filed April 14, 2010
Form 10-Q for Quarter Ended September, 2010
Filed November 15, 2010
File No. 00-52792

Dear Mr. Boosidan:

We have reviewed your response letter dated December 17, 2010 and have the following comments. As noted in our comment letter dated August 23, 2010 we have limited our review to your financial statements and related disclosures and do not intend to expand our review to other portions of your documents.

Form 10-K for the fiscal year ended December 31, 2009

General

1. We note your intent to amend your Form 10-K and await your filing.

9 Business Combination, page F-16

2. We note your response to prior comments one and two. Please note that subsequent increases or decreases of interests that do not result in a change in control are accounted for as equity transactions. In this regard, the parent will not record any additional acquisition adjustments to reflect its subsequent purchases of additional shares in a subsidiary if there is no change in control. Instead, the carrying amount of the NCI will be adjusted to reflect the change in the noncontrolling ownership interest in the subsidiary. Any difference between the amount by which the noncontrolling interest is adjusted and the fair value of the

consideration paid or received is recognized in equity and attributed to the equity holders of the parent. Refer to FASB ASC 810-10-45-23 for further guidance. Please advise, or revise your financial statements accordingly.

3. We note your response to prior comment two. We reissue our prior comment and ask that you please provide us with a reconciliation of the amount of loss attributable to noncontrolling interest of (\$326,385) on your consolidated statements of operations to your 42% noncontrolling ownership percentage in SDS Israel. Similarly, provide us this reconciliation for each quarterly period in fiscal 2010. Please advise, or revise your financial statements.

Item 9A. Controls and Procedures, page 9

4. We note your response to prior comment one indicating your certifying officers have considered the effect of the errors on disclosure controls and procedures. Similarly, please address whether your certifying officer considered the effects of the errors on internal controls over financial reporting. Further, if such officers have concluded that their previous conclusions regarding effectiveness were incorrect with respect to the periods to be restated, you should disclose this determination. Otherwise, please explain to us why the discovery of these errors did not affect your conclusions regarding effectiveness. Your response should also address your conclusions and disclosures included in subsequent Forms 10-Q as well. Reference is made to Items 307 and 308 of Regulation S-K.

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Scott Stringer, Staff Accountant, at 202-551-3272 or Robert Babula, Staff Accountant, at 202-551-3339 if you have questions regarding comments on the financial statements and related matters. Please contact me at 202-551-3720 with any other questions.

Sincerely,
/s/ Andrew Mew
Accounting Branch Chief