

October 2, 2013

Inspector General Arthur A. Elkins, Jr.  
U.S. Environmental Protection Agency  
William Jefferson Clinton Federal Building  
1200 Pennsylvania Ave., NW, Mail Code 2410T  
Washington, DC 20460

Dear General Elkins:

I am writing on behalf of Public Employees for Environmental Responsibility (PEER) to request that your office review the absence of safeguards concerning conflicts affecting the regulatory role of the U.S. Environmental Protection Agency (EPA) when exercised relative to agency “technology partners” with whom EPA has entered into financial arrangements. Further, individual EPA employees directly profit from patent licensing arrangements without apparent oversight of their actions relative to these technology partners.

In addition, we think that a review as to whether EPA technology development activities have achieved their intended results is well past due.

The prime example illustrating the need for both of these related requests is the Navistar debacle. EPA licensed clean diesel truck technology to Navistar, technology that EPA specifically claimed capable of meeting the 2010 on-road heavy duty NOx emission standard. This technology did not meet the standards. Rather than banning noncompliant engines (using technology licensed from EPA), EPA allowed Navistar to pay a fine while selling engines, continuing the technology licensing royalty payment stream to EPA.

### **Background**

The Office of Transportation and Air Quality (OTAQ) is responsible for regulating criteria and greenhouse gas emissions from mobile sources. A primary OTAQ responsibility is to determine whether proposed emission regulations are technically feasible.

At the same time, OTAQ manages the National Vehicle and Fuels Emission Laboratory (NVFEL) in Ann Arbor, Michigan. NVFEL tests vehicles before manufacturers begin selling them to ensure they meet the emission standards. NVFEL also tests vehicles borrowed from owners to determine the “in-use” emissions performance of vehicles and

if any are not meeting the emission standards. These tests are used to determine if manufacturers need to recall and repair vehicles which are polluting more than allowed.

In addition, NVFEL tests experimental and advanced emission control systems to evaluate the performance of future emission controls.

Above and beyond these responsibilities, OTAQ and NVFEL began developing and patenting technology for hybrid drive systems and diesel emission controls during the 1990s. OTAQ entered into a number of cooperating research and development agreements (CRADAs) with industrial partners. Some of these partners are also vehicle and engine manufacturers and are regulated by OTAQ.

Further, OTAQ licensed their diesel emission technology to firms regulated by OTAQ. The technical work for the CRADAs was performed primarily at NVFEL. The results of the CRADAs, however, are confidential.

### **I. Conflicts of Interest:**

The prospect of EPA regulating its business partner raises a number of conflicts of interest in a variety of circumstances, including the following:

#### **Between OTAQ and Industry**

Vehicle and engine manufacturers are required to meet OTAQ's regulations in order to sell vehicles and engines. By licensing technology to regulated companies OTAQ is creating at least a strong appearance of a conflict of interest that cannot be resolved.

Companies licensing OTAQ's patents make payments to OTAQ and OTAQ pays the inventors that developed the patent. Between 2001 and 2012 OTAQ has received \$12,633,061 in licensing royalties, according to agency records PEER has obtained under the Freedom of Information Act.

In our view, these licensing payments to OTAQ and OTAQ staff have the potential to create conflicts of interest.

#### **The Case of Navistar**

In 2004, NVFEL unveiled clean diesel combustion technology designed to meet the EPA light-duty vehicle Tier 2 and the heavy-duty on road emission standards for nitrogen oxides (NOx) associated with smog and acid rain. EPA named this technology Clean Diesel Combustion (CDC), for which it obtained patents. The 2010 EPA NOx emission standard is actually cited in patent descriptions.

That same year, EPA entered into a licensing royalty agreement for CDC with Navistar (formerly International Truck and Engine Corporation), which remains in effect today. The patents which relate to Navistar bear numbers: 6,301,888; 6,470,682; 6,651,432; and, 6,857,263 [see [http://www.epa.gov/osp/ftta/EPA\\_Patents-Vehicles.pdf](http://www.epa.gov/osp/ftta/EPA_Patents-Vehicles.pdf)].

Unfortunately for Navistar, its CDC-equipped engines have been unable to meet the NOx standards, despite the patent stating that it will meet the standard. Instead of banning the sale of noncompliant diesel trucks, EPA let Navistar pay a fine of approximately \$2,000 per truck and continue to market noncompliant vehicles.

In 2012 EPA issued a final rule Nonconformance Penalties for On-Highway Heavy-Duty Engines. While this rule concludes that Noncompliance Penalties are warranted for firms which cannot meet the 2010 NOx emission standard and identifies Navistar as the technological laggard, this document does not disclose that Navistar is licensing EPA NOx emission reduction technology.

Navistar remains the only on-road heavy-duty manufacturer which has not met the NOx emission standards.

### **Internal OTAQ conflicts**

Even as it pays the fines, Navistar is also paying EPA royalties in amounts the agency refuses to divulge. We only have a general idea of how much money EPA employees are receiving from these licensing arrangements. According to the documents PEER obtained through the Freedom of Information Act, between 2001 and 2012, the amount of \$1,841,388 has been paid to individual OTAQ engineers who developed and licensed patents, under terms of the Federal Technology Transfer Act.

OTAQ's senior leadership team, which sets the regulatory and oversight function of OTAQ, includes staff members who also direct OTAQ's technology development activity while they have been or are receiving license payments from regulated firms.

### **Areas of Concern**

These developments raise a number of unresolved concerns:

1. There appears to be no safeguard against EPA giving an enforcement break or other preferential treatment to a company with which the agency is in a business partnership
2. To our knowledge, no third party assessment of possible EPA conflict of interests relative to Navistar was conducted or has been conducted.
3. The agency has not affirmatively disclosed its business relationships with regulated firms. Nor has it informed competitors of those technology partners about the agency's business relationships.
4. OTAQ routinely reviews confidential business information describing the most critical proprietary details of vehicle emission control. In addition, OTAQ has the authority to ask manufacturers to provide complete, detailed descriptions of the design and operation of their emission control systems. As a business partner/competitor this creates many potential conflicts. With this regulatory oversight function, how does EPA ensure that confidential information is not

utilized or accessed for OTAQ's technology development activities? It would be inappropriate for OTAQ to use its regulatory oversight function to either develop technology or to evaluate if regulated companies are infringing on EPA patents.

5. We are unaware that OTAQ has developed a policy regarding enforcement of EPA technology agreements. Nor has it spelled out the basis for pursuing any company or companies for patent infringement.
6. Nor do we believe that EPA has developed any policies or even guidelines which ensure individual EPA staff who are receiving royalty payments for their inventions are also not involved in regulatory activities or regulatory oversight at OTAQ. It is inappropriate for EPA staff members to buy and sell stock of the companies they regulate. Presumably, it would be equally inappropriate for EPA employees who are receiving royalty payments from a regulated firm to participate in regulatory activities.

## **II. EPA Technology Development:**

Since the mid-90s, the federal government has spent more than \$2 billion developing motor vehicle and engine technologies to improve fuel economy and reduce emissions. A large portion of this funding flowed through the National Vehicle & Fuel Emissions Laboratory, including an estimated \$250 million for its “Advanced Technology” efforts since 2001 according to agency figures supplied to PEER.

EPA has not revealed specifically how many taxpayer dollars were spent to develop the patents licensed to Navistar. Whatever the amount, the value of this investment was significantly deflated after the technology it licensed did not enable the company to achieve the 2010 NOx standard – despite EPA warranting the technology as capable of meeting that standard.

### **Areas of Concern**

The sizeable public investment in technology development by EPA does not appear to have been matched with any meaningful analysis of the cost-effectiveness of that investment. In particular, these questions appear to remain unaddressed:

1. Has EPA performed an evaluation of why Navistar was unable to achieve the goals their patents stated were met?
2. Has OTAQ reviewed the results of its technology development activities and whether the CRADA programs have produced the intended results?
3. What policies are used by OTAQ to determine which technologies warrant patenting? Or, is this simply the responsibility of the OTAQ staff responsible for technology development? What policies govern which technologies OTAQ offers for licensing?

**Request for Review**

The Navistar episode poses the question of whether EPA is a referee or a player. If it chooses to play both roles, how does it preserve integrity as a regulator?

Even more fundamentally, there is no clear consensus as to what role EPA should play in supporting industrial research and development. If there is an appropriate role, what measure should EPA use to gauge how much of an investment in R&D makes sense?

In order to resolve these questions, PEER requests that your office undertake a two-part review to address the following:

- What steps should EPA take to eliminate the actual and perceived conflicts inherent in regulating a business partner? and
- Are taxpayers receiving a fair return from the huge public investment by EPA in engine research?

In our view, this review would make a unique contribution as no similar inquiry has previously been conducted. Moreover, we believe that your office is the most appropriate entity to pursue these inquiries.

If PEER can provide you with any additional information needed to evaluate this request, please do not hesitate to contact me.

Sincerely,

Jeff Ruch  
Executive Director