NPRA

WRITTEN STATEMENT OF

NATIONAL PETROCHEMICAL & REFINERS ASSOCIATION (NPRA)

AS SUBMITTED TO THE

SUBCOMMITTEE ON EMPLOYMENT AND WORKPLACE SAFETY

Committee on Health, Education, Labor and Pensions
United States Senate

on

"Production over Protections: A Review of Process Safety Management In the Oil and Gas Industry"

June 10, 2010

I. Introduction

Good morning, Chairman Murray, Ranking Member Isakson, and Members of the Subcommittee. I'm Charlie Drevna, and I serve as President of NPRA, the National Petrochemical & Refiners Association. I appreciate the opportunity to testify at today's Subcommittee hearing dealing with process safety management in the oil and gas industry.

I know that in the public mind, the oil industry is a collection of giant companies that do everything – explore and drill for oil, turn it into fuel and other useful products, and own gasoline stations where you fill up your car or truck. But that's not the reality. While some companies both get the oil out of the ground and refine it, many more operate only refineries or petrochemical plants. And nearly 95 percent of gasoline and diesel fuel is sold today by independent owners and operators of service stations and convenience stores that buy fuel from refineries or other distributors.

NPRA represents more than 450 businesses, including virtually all U.S. refiners and petrochemical manufacturers, their suppliers and vendors. Our member businesses provide the transportation fuels that keep Americans moving on the ground and in the air – safely, reliably and cost-effectively. Our members also supply families with a wide variety of products used daily in their homes and at work, including fuels, lubricants, and chemicals that serve as building blocks for everything from plastics to clothing, life-saving medicines and computers.

NPRA represents what we call "downstream" activities – we don't focus on getting oil out of the ground or offshore, we focus on turning it into useful products. Or to paraphrase an advertising slogan: We don't produce the oil, we make the oil you buy better. The oil that comes directly out of the wellhead is useless until it's refined into a fuel or a petrochemical, and that's the important work our members do.

While some NPRA members also explore and drill for oil and natural gas, we don't represent that part of the business – what we call "upstream." So even though – like all Americans – we're following news reports and are saddened at the tragic loss of life and terrible environmental damage caused by the leak from the Deepwater Horizon in the Gulf of Mexico, it's not something I can speak to because it's outside the scope of the activities NPRA represents. Our thoughts and prayers go out to those who have died and to the many people who are suffering in the Gulf. These fine people are our friends and neighbors too, given the refining and petrochemical industries' significant presence in the region. We hope the leak can be stopped as quickly as possible, and that cleanup activities and safety improvements can proceed swiftly and effectively.

II. Safety Is Paramount

I'm here today to talk about safety in petroleum refineries and petrochemical manufacturing plants operated by NPRA members. Let me begin by saying as clearly and emphatically as I can that nothing – absolutely nothing – is more important to us all than workplace safety. Nothing is more precious than the good health and the lives of our employees and contractors. They are the institutional knowledge of our industry and these men and women are not just statistics or assets to us. They are our co-workers, friends and neighbors. Their children go to the same schools as the children of management, their families go to the same churches, they belong to some of the same clubs and sports teams.

Despite media characterizations and the belief of some that our industry values "production over protections," the financial and business costs of workplace incidents are so heavy that it makes good business sense to keep our facilities as safe and reliable as possible. There is simply no situation where lax safety procedures will create any sort of benefit.

Just last month, NPRA held a two-day National Safety Conference in San Antonio and approximately 400 safety specialists from our member refineries, petrochemical plants and contractors attended. Safety is not a new issue for us. We've been holding these national conferences annually since 1991, and regional conferences were held in prior years. This year's conference was very informative and helped everyone there learn important lessons from past incidents and best practices on how to improve safety at their facilities.

Because we take the subject of safety so seriously, we invited Jordan Barab, the Deputy Assistant Secretary of Labor for Occupational Safety and Health, to speak to our safety conference this year. Mr. Barab acknowledged the work our members are doing in safety, saying: "OSHA recognizes that you are America's quiet heroes and deserve our thanks." But he also made clear that more must be done. Our response: We agree wholeheartedly with both assessments. And we believe that the best way to improve safety in our industry is to work in cooperation – rather than confrontation – with all stakeholders: OSHA, the Chemical Safety Board, labor unions, contractors and Congress. We all seek the same goal – safe workplaces, where every worker goes home safe and sound every day. Issuing dueling press releases, denouncing each other for the TV cameras and in expensive ads, and using inflammatory rhetoric to score political points won't accomplish our common goals and, if anything, will only serve to make the task even harder. Instead of applying our energy to escalate the rhetoric of charge and countercharge involving safety, we must join forces to improve the reality of safety.

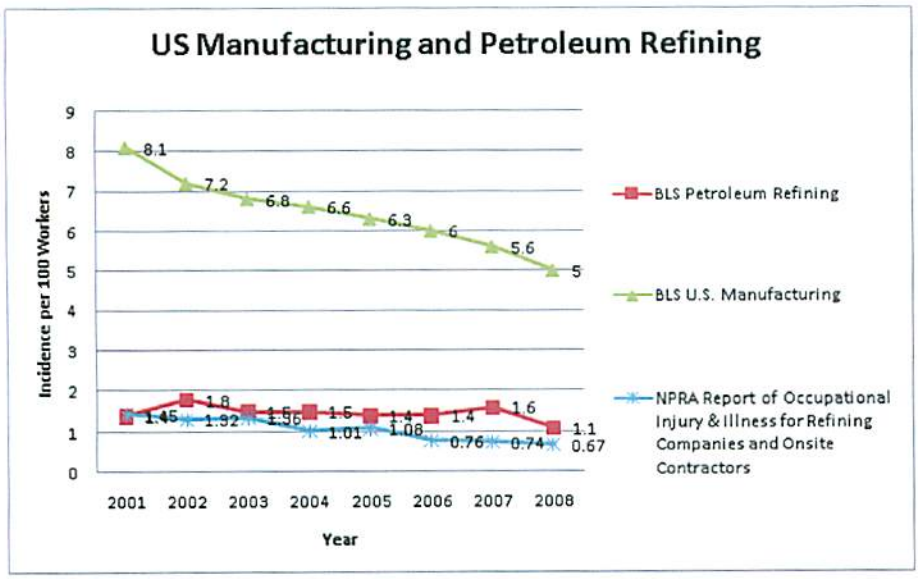
This is why we are planning a workshop focusing on refinery safety that we'll conduct with significant input from OSHA and labor this fall. The workshop is the outgrowth of a meeting that American Petroleum Institute (API) President and CEO Jack Gerard and I had with Assistant Secretary of Labor for OSHA Dr. David Michaels and many of his senior staff. This

workshop will give all stakeholders in our industries an opportunity to build on our safety conference and share knowledge with each other to make refineries and petrochemical plants safer. It's important to understand that while anti-trust laws prevent competing companies from sharing a great deal of business information, there are no restrictions on sharing information about safety. NPRA and our safety conferences are important vehicles that help our members learn about things that go wrong and things that go right in each other's facilities, so they can all engage in continuous improvement of their safety efforts. Our members don't compete with each other on safety – they stand together.

There is no denying the fact that there are inherent risks involved in the refining and petrochemical manufacturing process. Petroleum is an explosive and flammable substance, and converting it into useful fuels and chemicals requires extremely volatile materials to be subjected to high pressure and high temperatures, using complex processes and equipment. Despite this, our rate of workplace-related incidents is historically extremely low, and we protect our workers through process and personnel safety programs better than almost any other manufacturing industry in the United States.

The chart below illustrates our record in personnel safety. Personnel safety involves making sure people working in refineries and petrochemical plants follow proper operating and safety procedures, such as being alert to everything going on around them to avoid hazards, wearing proper safety equipment, and using proper lifting techniques to avoid injuries. Process safety, which is required under OSHA regulations, is just as important. It involves making sure that a facility operates properly and handles hazardous substances in a manner that will avoid chemical releases and other incidents that could harm people or cause damage to equipment, the facility itself, or the surrounding area. Industry realizes that process safety incidents have the

potential to cause significant injuries and fatalities. For this reason, we have developed a standard for measuring the health of a process safety management program, ANSI API RP 754. NPRA will formally begin collecting applicable 2010 data in January 2011.



I want to emphasize that while safety has been improving in the industry, we want to ensure we stay on this path, which is why we feel the status quo – however positive the numbers may indicate – is never acceptable. We take all incidents seriously and conduct conferences and workshops like those previously mentioned to ensure our industry is continuously focusing on and improving safety.

III. Improvements Made

To paraphrase another advertising slogan, this is not your father's refining and petrochemical industry. There has been significant progress over the years as facilities continually enhance their safety programs and procedures; the result is fewer and fewer people being injured at refineries and petrochemical plants. NPRA and API have worked together on several new industry-recommended practices that will enhance workplace safety. There are approximately 30 safety and fire protection standards and recommended practices maintained by

API that refining companies voluntarily comply with in order to promote a safe working environment. In addition to refining industry standards, companies also comply with standards established by: the American National Standards Institute (ANSI); American Society of Mechanical Engineers; the Instrumentation, Systems, and Automation Society; and the National Fire Protection Association. Many of these standards are considered Recognized and Generally Available Good Engineering Practices and are enforced by OSHA's Process Safety Management Standard. NPRA has adopted the requirements of the ANSI approved API Recommended Practice 754, Process Safety Performance Indicators for the Petroleum and Petrochemical Industries. We will begin collecting process safety event data and report them publicly on an annual basis as required by the standard.

Let me give you just a few examples of safety progress we've made in the past five years, since the tragedy that usually comes up when refinery safety is discussed – the explosions and fire that killed 15 workers and injured many more at the BP refinery in Texas City. Our members have worked hard to learn from that terrible incident to improve safety at their facilities. In the past five years:

- There have been improvements in facility siting of permanent and temporary structures at refineries to locate them in safe places, as the improved facility siting standards are being implemented. More buildings are now blast-resistant. Exclusion zones are enforced to keep all non-essential workers away from certain locations during start-ups, shut-downs and disruptions – the most hazardous times. Operating procedures, worker training and safety instrumentation at refineries have all been reevaluated and improved to ensure workplace safety. Worker fatigue standards are being implemented to ensure that workers are alert on the job. Training and monitoring are focused on both leading and

lagging indicators. Leading indicators are warning signs of problems that may arise in the future. Lagging indicators are lessons to be learned from things that went wrong in the past, to prevent a repetition of past problems. *All* events are counted and investigated, no matter the size.

- There is a constant emphasis on the equal balance of both personnel and process safety. The objective of process safety is to identify problem areas and correct them before they lead to safety incidents. Our members realize that preventive steps make sense because they reduce workplace-related incidents and improve the reliability of the facility. Individual companies did not wait for an industry standard on process safety metrics. They have already developed and implemented site-specific and company-specific process safety metrics that get regularly reviewed and shared with management, including company officers and directors. There is now an increased focus on common process safety metrics, specifically leading metrics. This includes standardization of metrics that will allow industry to benchmark and set performance goals. These metrics will significantly impact the methods used to measure process safety performance, with the expectation that they will advance improvements in process safety. Our members realize that OSHA's standard measurement of occupational injury and illness measures personnel safety, and that an additional measurement is needed for process safety. NPRA will begin collecting and analyzing process safety metrics next year, in a manner similar to the way we collect and analyze statistics on worker injury and illness.
- Process safety management and plant reliability have been integrated and improved because management has a greater understanding of the correlation between the two. This has increased the preventive and predictive maintenance at facilities to keep

problems from arising and increased upper management's knowledge and awareness of process safety management and metrics.

Although our safety record compares favorably with many industries, and our rate of workplace injuries at refineries and petrochemical plants is lower than that in many industries, we measure success by looking in the mirror rather than by comparing ourselves with others. We firmly believe that there is no tolerable level of injury. There is no tolerable level of workplace-related incidents. Our goal is to reduce these to zero, and we will do everything possible to reach that goal.

Our members go above and beyond what is required by OSHA and other government regulations, and are always reviewing new techniques to improve both personnel and process safety. They have invested and will continue to invest heavily to make refining and petrochemical manufacturing processes safer. They work to manage the complex risks inherent in their production activities by quick recognition and mitigation of hazards. In addition, several layers of protection are in place to prevent employee injuries when an incident occurs. Refining and petrochemical plants record and learn from all incidents big and small, and implement necessary changes in procedure in an effort to prevent problems from reoccurring. For large incidents, our industries don't wait for the Chemical Safety Board or OSHA to publish a formal report. Once the cause of an incident is suggested, company experts investigate their own processes and share findings with the industry.

In addition, many NPRA members are enthusiastic participants in OSHA's Voluntary Protection Program (VPP), which advances worker protection by promoting and recognizing effective workplace safety and health management. Under VPP, management, labor and OSHA establish a cooperative relationship at a worksite that has implemented strong safety and health

systems. In order to qualify for VPP status, sites must meet or exceed all OSHA regulatory standards and submit to an OSHA review of their programs. VPP sites are not exempt from OSHA's Refinery Process Safety National Emphasis Program and must submit annual process safety evaluations with a three-year OSHA onsite follow-up. This process gives OSHA the opportunity to continually maintain a presence at these sites as opposed to a one-time enforcement contact, which is the case with non-VPP sites. NPRA members currently represent 95 VPP facilities, 27 VPP contractor sites and 49 union VPP sites. The success of VPP is based on its dynamic approach to encourage safety and health beyond targeted goals of traditional enforcement. The VPP process emphasizes continual identification and elimination of hazards at worksites. Participants in VPP have enjoyed significant worker injury rate reductions – a 50 percent difference between VPP and non-VPP sites is not uncommon in our experience. Few programs have achieved such unified support from workers, businesses and government.

The VPP sites also assist in training OSHA compliance officers in refinery safety and process safety management. We would like to see the VPP maintained in its current state as a continuous collaborative improvement process to drive safety efforts. It should not be reduced, as has been proposed.

NPRA strongly encourages OSHA to continue its collaborative approach to workplace safety. Safety and health in the workplace requires the careful combination of both enforcement methods and cooperative programs. VPP adds value to workplace safety and health by encouraging worksites to go beyond compliance. In January of this year, I sent a letter (Attachment I) to OSHA Assistant Secretary Dr. David Michaels outlining the benefits of VPP and our concerns with the program's decreased funding and personnel allocation. Dr. Michaels responded (Attachment II) to NPRA saying: "[T]he agency will focus its scarce resources on

employers that need the most help and attention." In addition, NPRA reiterated the positive contribution VPP and other cooperative programs have on workplace safety in written comments (Attachment III) for *OSHA Listens: Occupational Safety and Health Administration Stakeholder Meeting* (OSHA Docket No. OSHA-2010-0004). Programs like VPP and other outreach and education efforts are essential in maintaining a safe workplace.

IV. Targeting the Most Serious Problems

In his speech to our National Safety Conference, Jordan Barab said: "OSHA has a responsibility to work closely with those facilities having the most frequent and serious safety violations, concentrating its limited resources on facilities where they are most needed." Mr. Barab went on to tell NPRA members that OSHA officials need to "find a better way to target problem refineries so that we aren't wasting our time or your time inspecting refineries that don't have major problems." And he said, speaking for OSHA: "We want to work with you and other stakeholders like unions and experts to find a better way to target problem refineries for more attention." NPRA wholeheartedly endorses this common-sense approach, which is long overdue.

It is impossible and unnecessary to have OSHA inspectors stationed at every workplace in America, looking over every worker's shoulder, every hour of the day to enforce workplace safety. These overworked and dedicated inspectors can't be in more than one place at a time. In trying to make everything a priority, nothing becomes a priority. Instead, as Mr. Barab told us, OSHA's attention needs to be focused on facilities and companies with the most serious problems. Rather than treating all safety violations that inspectors find equally – from the most minor to something that could cause a deadly explosion – we need to focus the most resources on correcting violations that pose the greatest safety risks. In the same way, when looking at the

number of injuries at a facility we need to focus on injuries that result in workers missing time on the job, not equating them statistically with minor injuries that result in no lost time.

Looking at safety and injuries in this way shows that NPRA members have made tremendous strides in recent years to improve safety at their facilities, and are working every day to make further improvements. It discredits the view of some that there is a systemic safety problem at refineries and petrochemical plants in the United States. This view is simply not accurate. Are we perfect? No. But is a perfect safety record our goal? Yes. Will we continuously work towards that goal to the best of our ability? Yes. We need OSHA to extend a helping hand to our members to assist them in complying with regulations and creating safer workplaces. We need other federal agencies and unions to do the same. Improving safety should not be a battle between adversaries, but a joint campaign of allies. And the best measure of safety is not how many new standards have been issued, or how many citations have been written, but to what extent process safety incidents, illnesses, injuries and fatalities have been reduced. We will not be satisfied until workplace deaths have been reduced to zero.

Should OSHA use its enforcement arm against operators of refineries and petrochemical plants that commit serious violations and aren't taking necessary steps to comply with safety regulations? Absolutely. If there are bad actors, government should be acting against them. But in all fairness, it is not accurate to paint everyone in the domestic petroleum refining and petrochemical business – or any business for that matter – with a broad brush, condemning all because of the actions of a very few.

V. Conclusion

When he spoke to our National Safety Conference, Jordan Barab discussed what he called "the need to build a strong corporate safety culture," which he defined as a way of doing

things that incorporates safety into all activities. "Organizational safety culture must come from the top," he told us. We agree. Our members are committed to fostering a culture of safety that comes from the very top and includes every single employee and contractor. This is a culture where everyone can honestly say "the buck stops here" when it comes to safety. A culture where everyone pays attention to training, follows proper procedures, reports problems promptly and takes all necessary precautions to avert safety incidents. They do this because they understand this is the best way to protect themselves, their colleagues, and the facilities that provide them with jobs. This behavior coming from within our member facilities does more than anything else to promote safety.

Along these lines, we also agree with – and have long been following – the advice Mr. Barab gave us when he told our members: "And watch for the small things – the tip of the iceberg principle. The few problems you do see, particularly at higher management levels, are probably a fraction of the problems you don't see below the surface. Follow up on close calls and unusual circumstances; these can point to underlying problems that, if not addressed, could lead to tragedy."

NPRA and our members place the highest possible emphasis on the safety of refining and petrochemical manufacturing operations and go to great lengths to make facilities as safe as possible for the sake of those who work there and for the neighbors who live and work in the surrounding communities. We focus on management systems to drive and continually improve process safety, work practices and reliability. We emphasize the training of workers and the prevention of safety incidents. Our members learn as much as possible from any safety incidents that pose a risk to human health or the environment, and then use that knowledge to make their operations safer.

Safety isn't the job of just the operators of our member facilities, or just the federal government, or just the unions, or just individual workers. It's the job of us all. Working together to share our knowledge and learning from each other about things that go right and things that go wrong, struggling together in the face of inevitable setbacks, and always maintaining a spirit of partnership, we can build on what has been accomplished and make our workplaces even safer. I pledge to you today that this is the course to which NPRA and our members are committed, and I ask you and all our other stakeholders to join us.