

April 29, 2013

MEMORANDUM TO: R. W. Borchardt  
Executive Director for Operations

THRU: Roy P. Zimmerman, Director **/RA/**  
Office of Enforcement

FROM: Lisamarie L. Jarriel **/RA/**  
Agency Allegation Advisor

SUBJECT: ALLEGATION PROGRAM — 2012 ANNUAL TRENDS REPORT

In accordance with Management Directive 8.8, "Management of Allegations," dated November 15, 2010, the Agency Allegation Advisor is to provide the Executive Director for Operations an independent annual report analyzing allegation trends. A copy of the annual trends report for calendar year 2012 is enclosed.

The report analyzes national, regional, and site-specific trends in allegation data. The analyses provide insights into the safety conscious work environment (SCWE) at six operating reactor sites and one vendor site. The trends for the reactor facilities do not suggest a concern about the environment for raising concerns; however, the staff continues to closely monitor the vendor facility to ensure timely and effective actions are taken to address existing SCWE issues. The report also summarizes staff activities involving the Allegation Program and related policies, including the development of enhanced guidance for Nuclear Regulatory Commission staff considering issuance of a chilling effect letter.

Enclosure:  
As stated

CONTACT: David J. Vito, OE/CRB  
(301) 415-2319

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M. Doane, OGC	C. McCrary, OI	J. Wiggins, NSIR
C. Haney, NMSS	V. McCree, RII	R. Zimmerman, OE

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<b>OFFICE</b>	OE:AAA	TechEditor	OE:OD
<b>NAME</b>	LJarriel	JDougherty	RZimmerman
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# **ALLEGATION PROGRAM**

## **ANNUAL TRENDS REPORT**

**Calendar Year 2012**

**U.S. Nuclear Regulatory Commission  
Office of Enforcement  
Washington, DC 20555**

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**EXECUTIVE SUMMARY**

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U.S. Nuclear Regulatory Commission (NRC) Management Directive 8.8, "Management of Allegations," dated November 15, 2010, requires the Agency Allegation Advisor to prepare an annual report for the Executive Director for Operations that analyzes allegation trends. This annual report fulfills that commitment by providing national, regional, and site-specific trend analyses. In addition, this report discusses staff activity in calendar year (CY) 2012 involving the Allegation Program and related policies. Lastly, the allegation staff continues to implement the agency-sponsored alternative dispute resolution (ADR) process for discrimination allegations (Early ADR). This pre-investigation process provides an individual and his or her employer (or former employer) the opportunity to resolve an allegation of discrimination through mediation rather than fully litigate the discrimination allegation or have the NRC initiate an investigation. The NRC pays for, but is not a party to, the voluntary mediation in these circumstances. Approximately 35 percent of the CY 2012 mediated discrimination concerns reached settlement.

The total number of allegations<sup>1</sup> received for reactor and materials licensees and vendors increased by more than 5 percent in CY 2012, to approximately 600, reversing a declining trend in the last 2 years. The increases and decreases in allegation receipt over the last 5 years do not appear to be the result of a general industry issue or other external factor. Rather, the substantive changes in the number of allegations received were based on a variety of plant-specific matters.

Each allegation can include multiple concerns. Over the last several years, the trend in the total number of concerns has paralleled the trend in total allegations (e.g., if the number of allegations increased, the number of concerns increased as well). In CY 2012, however, while there was an overall increase in allegations received, a decrease in the number of materials facility concerns counterbalanced an increase in reactor-related concerns and resulted in the total volume of concerns remaining at the CY 2011 level. The largest percentage of concerns received nationwide were discrimination concerns, although their number declined slightly from the number of discrimination concerns received in CY 2011. These concerns involved workers from a variety of functional organizations, although there were concentrations of discrimination concerns raised by personnel in both security and maintenance organizations. The majority of those involving security were from a variety of sites and utilities in Region I. There is no pattern or trend in the maintenance-related discrimination concerns. While the number of security-related concerns also remained at a high level, many of the concerns raised involved only a small number of reactor sites. Finally, a 10 percent increase in the number of chilling effect concerns can be attributed to significant activities—including construction, maintenance, and extended outage work—at a limited number of sites.

For some reactor licensees and one vendor, the NRC received allegations in numbers that warranted additional analysis. In preparing this report, the staff reviewed a 5-year history of allegations for reactor and materials licensees and vendors to identify adverse trends. The analysis focused on allegations that originated from onsite sources to help inform the NRC's review of the safety conscious work environment (SCWE).<sup>2</sup> Because a large volume of

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<sup>1</sup> An allegation is defined as "a declaration, statement, or assertion of impropriety or inadequacy associated with NRC-regulated activities, the validity of which has not been established."

<sup>2</sup> The total number of allegations received concerning reactor licensees from all sources, as well as other information concerning the Allegation Program, appears on the NRC's public Web site at <http://www.nrc.gov/about-nrc/regulatory/allegations/statistics.html>.

allegations from onsite sources may be indicative of a SCWE at risk, the staff selected six reactor sites and one vendor site with larger numbers of onsite allegations for a more in-depth SCWE review: San Onofre Units 2 and 3, Susquehanna Units 1 and 2, Watts Bar Unit 1, Sequoyah Units 1 and 2, Turkey Point Units 3 and 4, Indian Point Units 2 and 3, and Chicago Bridge & Iron's Lake Charles, LA, facility (formerly known as Shaw Modular Solutions). This report discusses allegation trends at each of these sites. In summary, the trends for these reactors do not suggest a concern about the environment for raising concerns; however, the NRC continues to monitor closely the vendor facility to ensure timely and effective actions are taken to address existing SCWE issues. No materials licensees were the subject of allegations at a level that warranted additional analysis.

Finally, in CY 2012, the NRC reviewed the effectiveness of eight Agreement State programs and concluded that, with one exception, the Agreement States continue to address concerns promptly, thoroughly document their investigations and closeout actions, inform the concerned individuals of the outcomes, and protect their identity. The Agreement State program that was found to be unsatisfactory in its review and response to allegations, Georgia, is implementing recommendations to strengthen its allegation program. The NRC staff is monitoring those actions closely.

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**OVERVIEW OF SIGNIFICANT PROGRAM ACTIVITIES**

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In calendar year (CY) 2012, the U.S. Nuclear Regulatory Commission (NRC) undertook various activities that affected the agency's Allegation Program and related policies. The agency developed guidance for the NRC staff considering the issuance of a "chilling effect letter" (CEL). NRC Form 3, "Notice to Employees," was updated in CY 2012 to reflect regional office moves and the agency continued its sponsorship of the alternative dispute resolution process for discrimination allegations (Early ADR). At the time this report was prepared, approximately 35 percent of the CY 2012 mediated discrimination concerns resulted in the parties (i.e., licensee and concerned individuals) reaching a mutually agreeable settlement.

**Allegation Program Guidance**NRC Chilling Effect Letters

On March 9, 2012, the staff issued enhanced guidance on the consideration and use of CELs. A CEL is a regulatory tool that the agency uses to ensure that licensees and other entities subject to NRC authority are taking appropriate actions to foster a workplace environment that encourages employees to raise safety concerns and to feel free to do so without fear of retaliation. The NRC refers to such an environment as a safety conscious work environment (SCWE).

The staff gathers insights into the SCWE at a particular site in several ways (e.g., reviewing the number and nature of allegations concerning that site and documented observations based on interviews with the licensees' employees and the review of pertinent documents during the baseline problem identification and resolution inspections). If the staff discerns that a work environment is "chilled" (i.e., not conducive to raising safety concerns internally), the NRC may request, in writing, information about the licensee's SCWE (i.e., a CEL).

A CEL may be warranted in two specific situations. The first situation arises when an allegation of discrimination is made directly to the U.S. Department of Labor (DOL). When an initial DOL investigation concludes that discrimination occurred, the NRC staff considers how the DOL finding will affect the SCWE. In particular, the staff needs to ensure that awareness in the workplace of DOL's discrimination finding has not created a chilling effect (i.e., has not discouraged other employees and contractors from raising safety concerns). The NRC Enforcement Manual provides detailed guidance on considering the issuance of a CEL in such cases. (The NRC Enforcement Manual appears on the agency's public Web site at: <http://www.nrc.gov/about-nrc/regulatory/enforcement/guidance.html#manual>.)

The NRC Enforcement Manual also recognizes a second situation in which the staff may consider issuing a CEL. For situations involving allegations and other indications of a chilled work environment that do not involve a DOL finding of discrimination, but nonetheless may warrant the issuance of a CEL, the staff prepared new guidance to ensure the effective and consistent use of this tool: Allegation Guidance Memorandum 2012-001, "NRC Chilling Effect Letters," dated March 9, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12025A055). The guidance does not represent new policies or practices; instead, it documents the NRC staff's existing practices regarding the factors that have been considered when deciding to issue a CEL, the process used to make that determination, the contents of the CEL, the evaluation of a CEL response, and the closure of the CEL. No CELs were issued in CY 2012, however, one was issued in CY 2013 shortly

before this report was completed. For more information, see the section entitled, "Allegation Trends for Selected Vendors; Shaw Modular Solutions", later in this report.

### NRC Form 3

The NRC updated publications related to the Allegation Program in CY 2012. The NRC's Form 3, "Notice to Employees," is required under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 19, "Notices, Instructions and Reports to Workers: Inspection and Investigations," to be posted by NRC licensees and applicants to inform their workers about employee protections against radiation and protections against discrimination for raising safety concerns. In February 2012 and again in May 2012, Form 3 was updated to reflect new contact information following NRC regional office moves by Regions I and IV. The latest version of Form 3 can be found on the NRC's public Web site at: <http://www.nrc.gov/reading-rm/doc-collections/forms/>.

### **Alternative Dispute Resolution Process**

The NRC's ADR Program includes the opportunity to use ADR early in the allegation process for cases of alleged discrimination before the NRC investigates the allegation. Early ADR provides parties additional opportunities to resolve their differences outside the normal regulatory framework, and it uses a neutral third party to facilitate discussions and the timely settlement of the discrimination concern. The NRC believes that voluntary dispute resolution by the parties using the communication opportunities that the Early ADR process provides can stem the inherent damage such disputes can inflict on the SCWE more quickly than an investigation. At any time, either party can exit the ADR process; whereupon an NRC investigation would remain an option if the alleged is still interested in pursuing the discrimination matter. More information on Early ADR can be found at: <http://www.nrc.gov/about-nrc/regulatory/enforcement/adr/pre-investigation.html> on the NRC's public Web site. Should such an investigation and resulting enforcement panel conclude that enforcement is warranted, the NRC and licensee still may engage in what the agency refers to as "post-investigation ADR." Additional information on that process can be found by going to <http://www.nrc.gov/about-nrc/regulatory/enforcement/adr/post-investigation.html> on the NRC's public Web site. If during Early ADR, however, the parties reach a settlement, the staff will not pursue an investigation or subsequent enforcement of discrimination findings. The NRC also considers settlements resulting from licensee-initiated mediation as equivalent to settlements reached under the Early ADR Program.

At the time this report was prepared, 17 of the Early ADR offers made by the NRC in association with discrimination allegations raised in CY 2012 had resulted in agreements to mediate. Of those 17 cases, six (35 percent) mediated discrimination concerns resulted in the parties reaching a mutually agreeable settlement. The remaining 11 cases were either still being mediated at the time of this report or failed to result in a settlement and the alleged requested an NRC investigation. To date, one investigation has been closed as unsubstantiated and five are still under investigation.

## TRENDS IN ALLEGATIONS

The NRC monitors allegations to discern trends or marked increases that might prompt the agency to question a licensee about the causes of such changes or trends. In preparing this report, the staff reviewed a 5-year history of allegations received for reactor and materials licensees and vendors. The staff focused on allegations with the potential to provide insights into the SCWE at a given facility. Such allegations include those submitted by current or former licensees, contractor employees, or anonymous sources that indicate an unwillingness to raise safety concerns internally. For power reactor facilities, the staff analyzes recent allegation activity twice a year in support of the Reactor Oversight Process (ROP) mid-cycle and end-of-cycle assessments. In addition, the staff may analyze a particular site or licensee whenever allegations or inspection findings indicate that such an analysis is warranted.

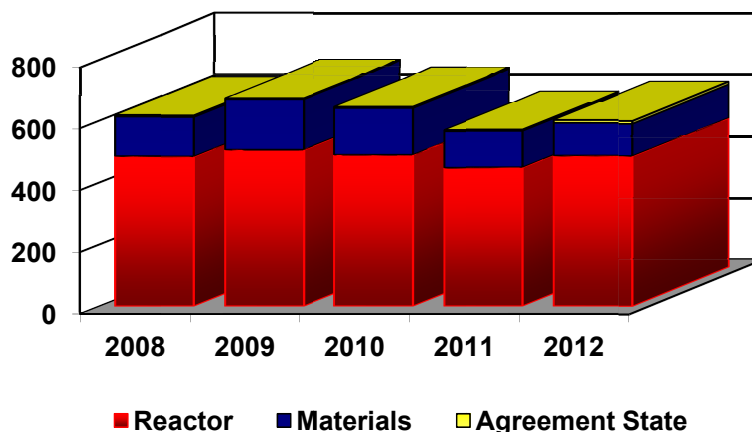
The staff also conducts reviews to identify national trends for reactor and materials allegations, shifts in users of the Allegation Program, and the effect that the implementation of the program has on the workload in the regions and program offices. The following section discusses these trends.

### National Trends

National trends provide general information to the staff about the effect of external factors, plant events, and industry efforts to improve the SCWE at NRC-licensed facilities. They can be useful in developing budget and planning assumptions to support future agency and Allegation Program needs.

Figure 1 shows that the NRC receives approximately 600 allegations each year and that although there had been a declining trend in the total number of allegations received from CY 2009 through CY 2011, allegations increased in CY 2012 by over 5 percent.

**FIGURE 1 - ALLEGATIONS RECEIVED BY CALENDAR YEAR**



In CY 2009, the total number of allegations received increased by about 10 percent over the total received in CY 2008, primarily because of substantive increases in allegations received about several reactor facilities and one fuel cycle facility. The decreases in allegations received in CY 2010 and again in CY 2011 appear to be the result of large reductions in allegations received for two reactor facilities that experienced SCWE problems in previous years, which resulted in the NRC issuing a CEL. As actions were implemented at these facilities in response to the identified SCWE problem and the related CEL, the number of allegations received dropped precipitously in subsequent years. While there was an increase in allegations related to reactor licensees in CY 2012, material licensee-related allegations declined. The increases and decreases in allegation receipt described above do not appear to be the result of a general industry issue or other external factor, since the reasons for the substantive changes in the

number of allegations received about these facilities were plant-specific and varied (e.g., significant outage activity, construction activity, security issues, work environment issues, or process/program changes).

The number of allegations that the NRC processed for Agreement State matters continues to be minimal. The total number of Agreement States remains at 37. Once the Agreement State Program is explained to them, most individuals who contact the NRC with concerns about Agreement State licensees indicate a willingness to contact and be contacted directly by Agreement State personnel about the evaluation of their concern(s). The NRC forwards these matters to the Agreement State and does not process them as allegations. Generally, the NRC uses the Allegation Program only to track the evaluation of concerns about Agreement State licensees when the concerned individual does not want his or her identity to be revealed to the Agreement State.

Because each allegation can include multiple concerns, the number of concerns received can provide more specific information on the staff effort needed for an appropriate response. Over the last several years, the trend in the total number of concerns has paralleled the trend in total allegations (e.g., if the number of allegations increased, the number of concerns increased as well). In CY 2012, although there was an overall increase in allegations received, the total volume of allegation concerns received remained at the CY 2011 level. While there was a decrease in the number of materials facility concerns, the number of reactor concerns increased nationally and in two of the four regional offices. Region IV, in particular, experienced an increase of over 30 percent in the number of reactor concerns received.

### Reactor Licensee Trends

To provide further insight into areas in which the NRC is allocating resources in the followup of reactor-related allegations, Figure 2 depicts the 15 functional areas that represent approximately 80 percent of the issues received nationwide in CY 2012.<sup>3</sup>

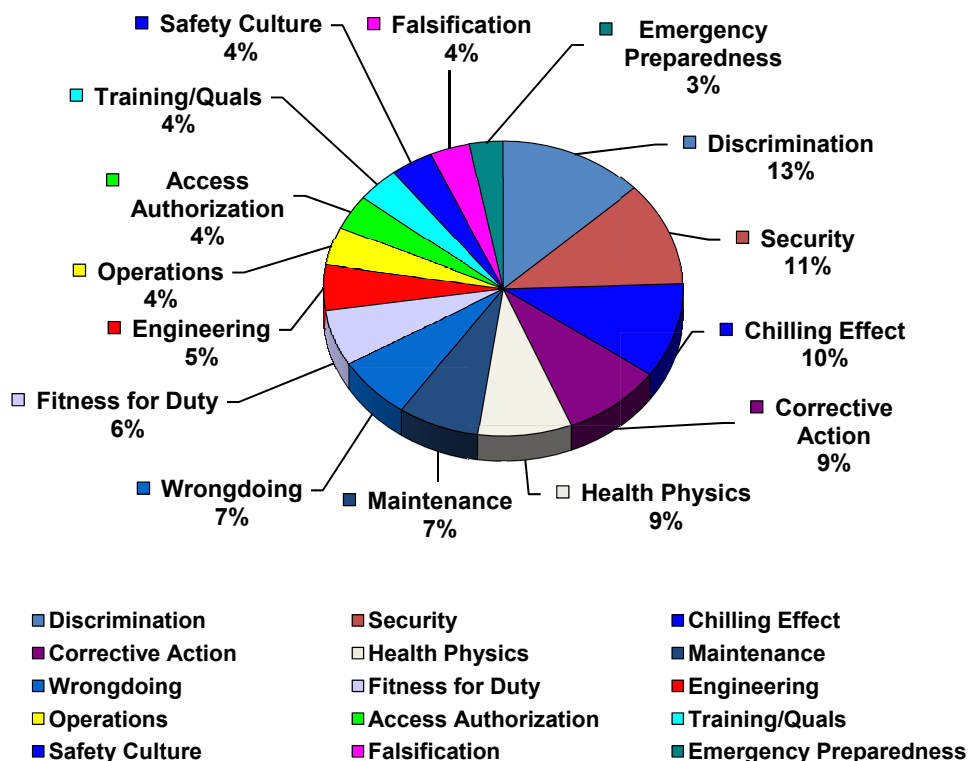
Figure 2 indicates that the largest percentage of concerns received nationwide were discrimination concerns, although their number declined slightly from the number of discrimination concerns received in CY 2011. A review of all discrimination concerns received in CY 2012 found that claims were made by approximately 30 percent more licensee employees than contractor employees at a consistent rate throughout the calendar year. Workers at reactor sites in Regions I, II, and IV raised more discrimination concerns than workers in Region III. These concerns involved workers from a variety of functional organizations, although there were concentrations of discrimination concerns raised by personnel in both security and maintenance organizations. The majority of those involving security were from a variety of sites and utilities in Region I. There is no pattern or trend in the maintenance-related discrimination concerns.

While the number of security-related concerns also remained at a high level, many of the concerns raised involved only a small number of reactor sites. The majority of security-related allegation concerns were received in CY 2012 from licensee employees and primarily from sites

<sup>3</sup> The agency received few concerns in the areas not depicted in Figure 2, which represent the remaining 20 percent of the issues received. These areas include emergency preparedness, quality assurance, fatigue/overtime, mechanical, electrical, construction, civil/structural, fire protection, Employee Concerns Programs, licensing, environmental, in-service testing, chemistry, environmental qualifications, heating, ventilation, and air conditioning, safeguards, criticality safety, procurement, nondestructive evaluation, and instrumentation and control.

in Region I. There were concentrations of concerns regarding security plan and procedure adequacy, discrimination, and security equipment issues.

**FIGURE 2 - REACTOR ISSUES NATIONWIDE 2012**



The total number of chilling effect concerns increased a little over 10 percent in CY 2012. The NRC uses the term “chilling effect” to describe a condition that occurs when an event, interaction, decision, or policy change results in a perception that the raising of safety concerns to the employer or to the NRC is being suppressed or is discouraged. The increase can be attributed to significant activities, including construction, maintenance, and extended outage work, at a limited number of sites. In general, there were concentrations of chilling effect concerns in the operations, engineering, quality assurance, and maintenance functional areas.

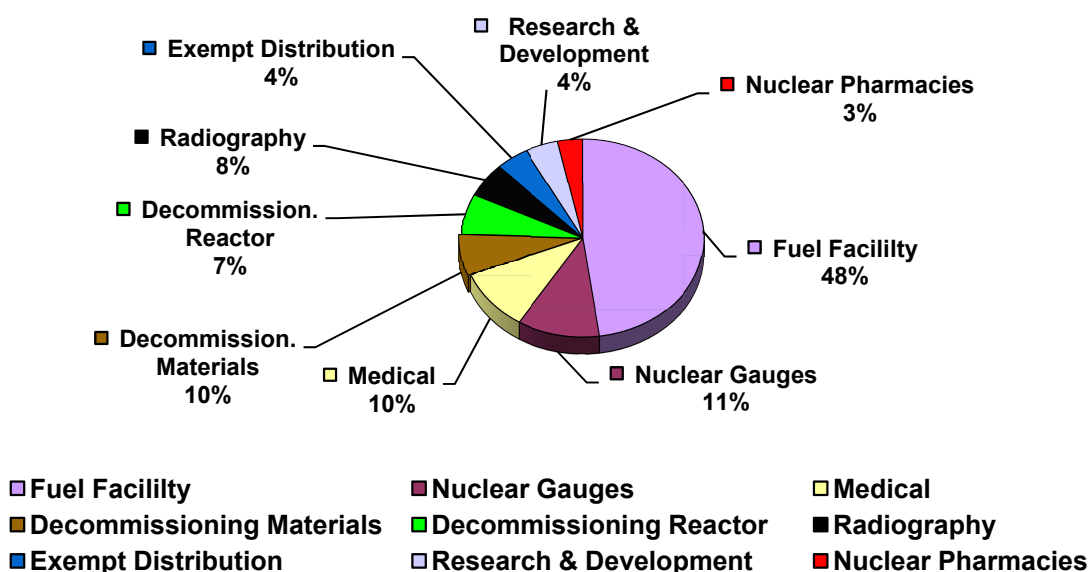
There was a slight increase in the volume of wrongdoing concerns received in CY 2012. The NRC defines “wrongdoing” as the willful violation of regulatory requirements through deliberate action or a violation resulting from careless disregard of regulatory requirements. Wrongdoing allegation concerns involved a number of disciplines; the largest volume involved the security area.

Other trends noted include considerable increases in the areas of maintenance and corrective action concerns that can be attributed to sites with significant outage activities. Trends also include less significant increases in health physics and engineering concerns that don’t appear to be related to any particular facility, work group, or event.

### Materials Licensee Trends

A comparison of the types of issues received does not produce meaningful results because there are many different types of materials licensees and the activities they perform vary greatly. To provide insights into areas in which the NRC focused its attention on materials-related allegations, Figure 3 depicts the nine types of materials licensees that accounted for approximately 80 percent of allegation concerns that the NRC received nationwide.<sup>4</sup>

**FIGURE 3 - MATERIALS LICENSEE TYPES NATIONWIDE 2012**



The NRC received 12 percent fewer allegations in CY 2012 in the materials area than in CY 2011. Since CY 2004, the number of allegations related to fuel cycle facilities has constituted the highest percentage (30 percent to 50 percent) of such allegations; however, fewer fuel facility-related allegations were received in CY 2012 than in CY 2011. As in CY 2011, allegations related to nuclear gauge licensees were the second highest percentage of materials allegations received in CY 2012. However, 40 percent fewer nuclear gauge-related allegations were received in CY 2012 than in CY 2011. Allegation receipt rates for both decommissioning reactors and materials facilities, and radiography licensees also dropped in CY 2012.

### Source Trends

Figure 4 provides a breakdown of 99 percent of the sources for reactors and materials allegations received in CY 2012.<sup>5</sup> The data indicate that the distribution of source categories remained consistent from CY 2008 to CY 2012. That is, employees of licensees (or former employees) and contractors (or former contractors) continue to be the primary sources of

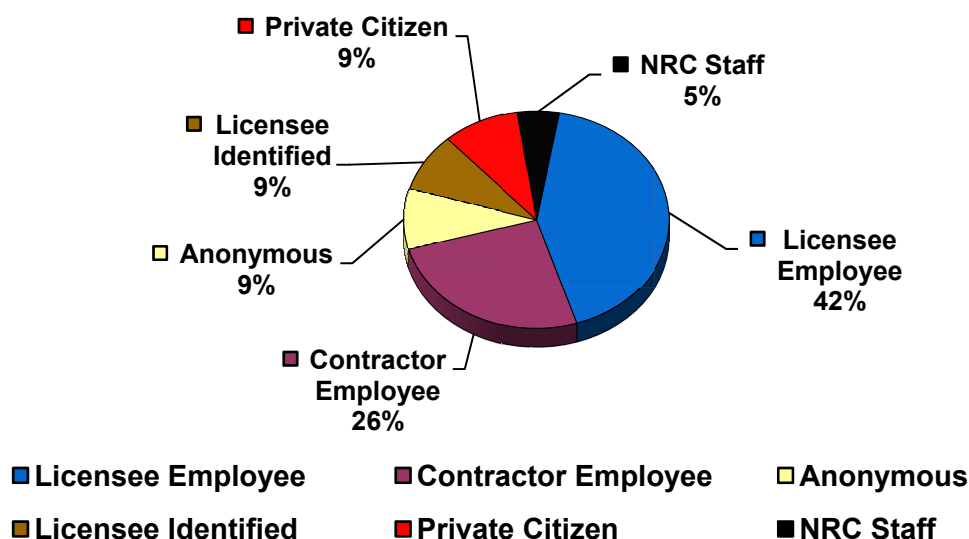
<sup>4</sup> The agency received few concerns about the materials licensee types that are not depicted in Figure 3, which represent the remaining 20 percent of the issues received. These licensee types include academic, casks, exempt distribution, general licensee, irradiators, nuclear pharmacies, special nuclear material, test and research reactors, transportation, waste disposal, and other types.

<sup>5</sup> The NRC received few concerns from the 1 percent of sources not depicted in Figure 4. These sources include the news media and special interest groups.

allegations. For CY 2012, the number of allegations raised by licensee employees increased by 14 percent, while the number of allegations raised by contractors declined 8 percent from the previous year. The number of persons wishing to remain anonymous declined in CY 2012 by approximately 18 percent compared to CY 2011.

In considering those allegation sources mentioned previously that have the potential to provide insights into the SCWE at a given facility (i.e., allegations submitted by current or former licensee or contractor employees or by anonymous sources), the percentage of allegations from these sources since CY 2008 has notably remained consistent around 75 percent.

**FIGURE 4 - ALLEGATIONS BY SOURCE CATEGORY 2012**



Two of the source categories deserve some explanation. The source category “NRC Staff” designates an NRC staff member who suspects that a regulatory requirement has been violated deliberately or as a result of careless disregard, thus prompting the initiation of an investigation by the NRC Office of Investigations. The source category “Licensee Identified” denotes that a licensee representative, acting in his or her official capacity, has reported potential wrongdoing to the NRC. The agency staff assigns an allegation process tracking number to such items so that the evaluation progress of the alleged wrongdoing issue may be tracked.

### **Allegation Trends for Selected Reactor Sites**

Trending the number and nature of allegations for specific reactor sites, individually and in the aggregate, is one method the NRC staff uses to monitor the SCWE at reactor sites. The appendix to this report provides statistics on allegations for all operating reactor sites. The NRC received the listed allegations during the 5-year period between January 2008 and December 2012 and included only allegations received from onsite sources (i.e., those that may be indicative of the health of the SCWE). Onsite sources include current or former licensee employees, current or former contractor employees, or anonymous allegers. For the purpose of this analysis, the NRC assumed that anonymous allegations came from onsite personnel.

Because a large volume of allegations from onsite sources may be indicative of a SCWE at risk, the staff conducted a more in-depth SCWE review of certain sites with larger numbers of onsite allegations. In previous years, the sites receiving additional review were determined by a

simple algorithm based on the median number of allegations received at operating reactor sites over the calendar year (that is, sites exceeding three times the median were chosen for a more in-depth SCWE review). However, because sites with a larger population of employees and contractors (such as 3-unit reactor sites) typically generate more allegations, normalizing the data helps to ensure that those sites are not disproportionately chosen for further analysis. Based on an NRC Office of Research study, the Agency Allegations Advisor adopted the use of the following criteria for CY 2012 to consider the varying workforce size at different sites, for both reactor and materials facilities, and determine which sites warranted further SCWE evaluation:

- 1 - unit reactor sites (or any site with fewer than 800 persons) with an onsite allegation volume greater than 2.25 times the median
- 2 - unit reactor sites (or any site with 800 to 1,100 persons) with an onsite allegation volume greater than 3 times the median
- 3 - unit reactor sites (or any site with more than 1,100 persons) with an onsite allegation volume greater than 4.5 times the median

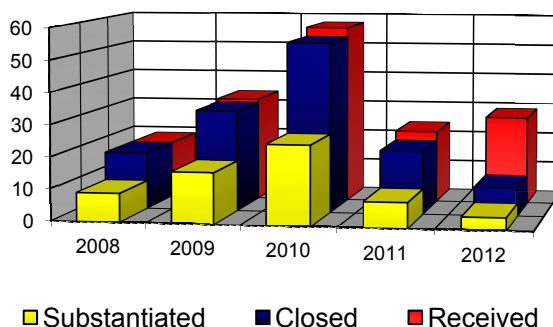
The staff recognizes, and takes into consideration when applying the above criteria, that during times of significant site activity, the site population may increase substantially.

For CY 2012, the median number of allegations per operating reactor site was 3.5. San Onofre Units 2 and 3 (28), Susquehanna Units 1 and 2 (21), Watts Bar Unit 1 (21), Sequoyah Units 1 and 2 (19), Turkey Point Units 3 and 4 (17), and Indian Point Units 2 and 3 (17), are the six operating reactor sites that met the above criteria. The sections below discuss the staff's analysis of the SCWE at each of these sites.

### San Onofre Units 2 and 3

During 2012, NRC received allegations from onsite sources concerning San Onofre Units 2 and 3 at a higher rate than the previous year (28 allegations in CY 2012, compared to 23 allegations in CY 2011), although the overall rate has decreased from the CY 2009 and CY 2010 time frame, when NRC assessment of the SCWE at San Onofre 2 and 3 prompted the issuance of a chilling effect letter in early 2010. An analysis of the subject matter of the allegations received in CY 2012 indicates concentrations in three functional areas (maintenance, operations, and engineering) with 50 percent of the allegations received from onsite sources in CY 2012 being focused in the maintenance area. Substantive outage activity in CY 2012 at San Onofre Units 2 and 3 (Unit 2 refueling outage, vessel head replacement, steam generator tube leak issues) likely contributed to the areas of concentration. Allegations were received on a

**FIGURE 5 - SAN ONOFRE 2 & 3 ALLEGATIONS**



consistent basis from January through September 2012, with a more concentrated receipt rate in the last quarter of CY 2012, after the licensee's initiation of a staff reduction in force (the Business Transformation process) during that time frame which, when completed in CY 2013, is expected to reduce the site population by over 700 workers. Allegations were received in CY 2012 primarily from current and former licensee employees, rather than contractors. There was one anonymous allegation.

Nine chilling effect concerns were raised in CY 2012 from various onsite sources. This represents a decrease in the amount of chilling effect concerns received by the NRC compared to the numbers received in CY 2009, CY 2010, and CY 2011, when over 15 concerns of this type were received each year. The chilling effect concerns received in CY 2012 were spread among multiple plant departments, and two were related to isolated incidents that affected only the individual who filed the concern. Chilling effect concerns received early in CY 2012 were closed as unsubstantiated based on the results of the 2011 NRC Problem Identification and Resolution (PI&R) inspection and on the licensee's most recent SCWE survey results, which found that the overall work environment at San Onofre 2 and 3 was continuing to improve as a result of actions taken since the issuance of the chilling effect letter in March 2010. A number of the chilling effect concerns received later in CY 2012 were related to the recent site reduction in force.

The number of discrimination concerns received by the NRC related to the San Onofre site from CY 2008 through CY 2012 (45) is the highest in the industry in that time frame. However, to date, none of the discrimination concerns have been substantiated. There were 10 discrimination concerns received in CY 2012, an increase from CY 2011, when seven discrimination concerns were received.

On September 6, 2011, the NRC followup actions related to the chilling effect letter issued in March 2010 were closed (ADAMS Accession No. ML112490114). To reach this determination, the NRC reviewed the licensee's root cause evaluations and planned corrective actions to improve the SCWE, which applied performance metrics to measure progress in the SCWE area. In addition to monitoring the licensee's corrective actions and performance against the established metrics, the NRC conducted multiple inspections in 2010 and 2011 to obtain input about the status of the SCWE at the San Onofre Nuclear Generating Station, the most recent being focused PI&R team inspections in January 2011 and May 2011 (ADAMS Accession No. ML111250473). During these inspections, over 500 plant employees were interviewed either individually or in a focus group setting. As a result, the NRC concluded that the licensee had made reasonable progress in addressing the SCWE problem, had implemented corrective actions that were effective in addressing underlying issues, and was committed to continued improvement in this area.

The San Onofre Employee Concerns Program (ECP) received fewer nuclear safety/quality concerns and SCWE-related concerns in 2012 compared to 2011, and considerably less than the number received in 2010 (when the NRC chilling effect letter was issued). ECP received more concerns in the first quarter of 2012, when extended outage activity was occurring onsite, compared to the remainder of the year. After the initiation of the company reduction in force effort in August 2012, ECP received few concerns related to the implementation of the first phase of the process (voluntary resignations). Later in 2012, ECP received a concentration of concerns from site departments that were being more significantly affected by later phases of the reduction in force. After the initiation of the Business Transformation process, the licensee established "SCWE Advocates" in the major work groups at the site. The SCWE Advocates pulse their department for reactions to the reduction in force and any other SCWE-related

matters. Meetings are held weekly with site senior management to discuss issues and proposed efforts in response.

In response to the most recent site SCWE survey in 2011, the licensee conducted a followup survey in April 2012, with attention to certain focus organizations. The licensee indicated that all of the focus organizations showed improvement in SCWE. It is also noted that a new ECP manager was assigned in late 2012, after the previous ECP manager took voluntary resignation as part of the first phase of the reduction in force.

In summary, while both the NRC and the licensee continued to receive allegations and ECP concerns respectively at a steady and comparatively high rate in 2012, the number and nature of concerns received do not provide evidence of a re-developing work environment problem at San Onofre 2 and 3. Because of the recent history of work environment issues at San Onofre 2 and 3 and the implementation of multiple response actions and management changes since the CY 2010 time frame, chilled work environment concerns continue to be received by the NRC. In 2012, however, there was a decreased amount of chilling effect concerns received compared to previous years. With regard to the licensee's recently initiated reduction in force (Business Transformation process), internal communication and support efforts by the licensee appear to be limiting the number of concerns being received by the NRC about this action. However, the remaining phases of the staff reduction, which will include employee layoffs, will have a higher likelihood of increasing the volume of concerns provided to the NRC if implementation is problematic.

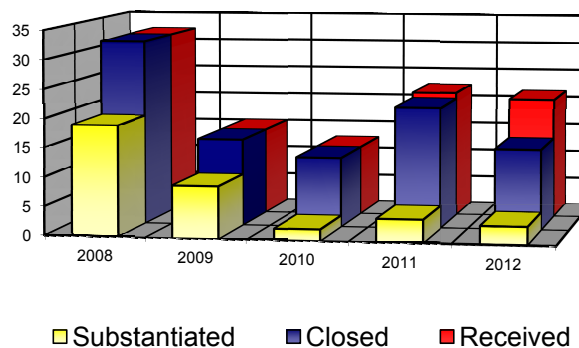
The NRC is maintaining its oversight of the SCWE at San Onofre 2 and 3 through normal inspection activities to ensure that the licensee continues its efforts to promote the SCWE and to monitor events and activities that could negatively impact the SCWE (in particular, the implementation of the remaining phases of the Business Transformation staff reduction scheduled to be completed by June 2013).

### Susquehanna Units 1 and 2

Although the number of allegations received by the NRC from onsite sources at Susquehanna Units 1 and 2 in CY 2012 (22) was similar to the number received in CY 2011 (21), the nature of the allegations received does not appear to indicate a work environment problem at the site. However, it is noted that chilling effect concerns continued to be raised to NRC regarding activities at Susquehanna at a relatively high rate in CY 2012.

A review of the subject matter, time of receipt, and variability of departments and issues involved demonstrated that the chilling effect concerns received in CY 2012 were not indicative of a SCWE problem at the facility or a trend in a specific department or discipline. The majority of the chilling effect concerns involved company policy issues and management behaviors. An analysis of the subject matter of the technical allegation concerns received in

**FIGURE 6 - SUSQUEHANNA 1 & 2 ALLEGATIONS**



CY 2012 regarding Susquehanna also does not indicate a trend in any specific functional area or concern type.

The number of discrimination concerns received by the NRC in CY 2012 represents an increase compared to previous years (six in CY 2012, three in CY 2011, three in CY 2010 and four in CY 2009). Of the 24 raised during the 5-year review period of 2008-2012, the agency has been unable to substantiate any to date. Two of the discrimination concerns raised in CY 2012 remain open.

The latest PI&R inspection at Susquehanna was completed in July 2012 and found an overall willingness of site workers to raise safety concerns. The inspection concluded that site workers were aware of the various avenues available for raising safety concerns. In addition, the PI&R inspection found that the results of the nuclear safety culture survey conducted in March 2011 provided the licensee with good insights into the safety culture of the Susquehanna 1 and 2 workforce.

The Susquehanna 1 and 2 ECP also received more concerns in CY 2012 (about 30 more concerns than CY 2011). While ECP normally receives more concerns during outage periods, the number of concerns received by ECP during the spring 2012 Susquehanna Unit 1 refueling outage was more than at other outage times. ECP attributed this increase primarily to company policy changes in early 2012 related to personal accountability and behavioral observation, along with management changes in the operations and training departments. Only two anonymous concerns were received by ECP in CY 2012. There were no ECP trends in the corrective action program area, which has been a trend area in the past.

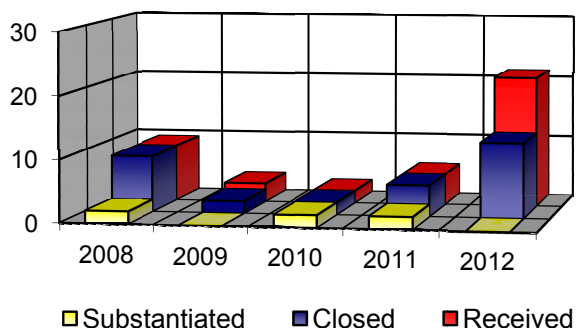
A site safety culture survey conducted at the Susquehanna Steam Electric Station in March 2011 identified concerns regarding the operations organization (a survey was conducted more recently in early 2013, but the results were still being evaluated at the time this report was being written). A new operations manager was brought on board in late 2012. Susquehanna ECP has received fewer concerns regarding operations since the hiring of the new operations manager. However, licensed operator staffing issues remain a focus area for ECP.

In summary, while the number and nature of allegations received by the NRC from onsite sources do not indicate a work environment problem with the overall population of workers at Susquehanna 1 and 2, some areas of concern still exist and are being monitored by the NRC through normal inspection activities. Attention is focused in the operations area as a result of recent management changes and continued staffing concerns.

### Watts Bar Unit 1

The number of allegations received by the NRC from onsite sources regarding Watts Bar Unit 1 in CY 2012 (21) increased significantly from the number received in CY 2011 (5). Analysis indicates that a third of the concerns raised involved Unit Operations and resulted from employee perceptions of an event in February 2012 concerning the licensee's implementation of the fitness-for-duty (FFD) program. Most of

**FIGURE 7 - WATTS BAR 1  
ALLEGATIONS**



the concerns received about the FFD program and chilling effect can be attributed to this event. The allegation receipt rate declined after the first quarter of CY 2012. Allegations were received primarily from licensee employees, both current and former. No allegations were received from anonymous sources.

There have been nine discrimination concerns received by NRC related to Watts Bar Unit 1 from CY 2008 through CY 2012. To date none have been substantiated. There were four received in CY 2012, an increase from the one received CY 2011. There were six allegation concerns received in CY 2012 asserting a chilled work environment. Four of the six were associated with the FFD issue mentioned earlier. The NRC did not substantiate a chilled work environment.

The last biennial PI&R inspection at Watts Bar Unit 1 was completed in March 2011. The inspection found that licensee management emphasized to employees the importance of reporting concerns, that reporting avenues are readily accessible, and that the workforce was willing to raise nuclear safety concerns.

The Watts Bar ECP continues to receive contacts at a consistent rate, but there was a decline in the receipt of nuclear safety concerns requiring full investigation. Since these types of concerns compare most directly with the types of concerns the NRC receives as allegations, the licensee conducted an analysis to compare recent ECP concern receipt rates to NRC allegation receipt rates. The analysis showed that NRC allegation receipt has been increasing while ECP concerns have been decreasing over the past 3 years. The licensee interpreted the results of the analysis as a lack of confidence in the ECP and took actions to address that finding.

The licensee conducted a fleet-wide nuclear safety culture survey in the fourth quarter of 2011 in response to a December 22, 2009, NRC Confirmatory Order. The survey results showed a substantial decline in employee perceptions from those reported in 2009 at Watts Bar, particularly in the SCWE area. The survey participation rate was only 61 percent, and was particularly low in parts of the operations and security organizations. The survey identified needed improvements in several areas, including SCWE and the corrective action program. SCWE weaknesses were identified in several departments.

Tennessee Valley Authority (TVA) completed an Apparent Cause Analysis in October 2012 regarding potential reasons behind the increase in the numbers of allegations received by the NRC. The licensee determined there were weaknesses in the three primary avenues for raising concerns (providing concerns to supervisors, the corrective action program, and the ECP), as well as weakness in communications regarding the resolution of concerns raised through those processes. Furthermore, the licensee concluded that they failed to recognize signs of the weakening SCWE from several sources, such as ECP pulsing data, safety culture survey results, and Nuclear Safety Review Board (NSRB) observations. Corrective actions have been initiated.

In summary, while there was a significant increase in allegations received by the NRC from onsite sources at Watts Bar Unit 1 in 2012, most were received in the first quarter of the year and resulted from employee perceptions related to one onsite event. The licensee recognized the increase and did an extensive analysis to explain it. Based on that analysis and the recent nuclear safety culture survey results, the licensee appears to have developed a comprehensive corrective action plan. The NRC is maintaining its oversight of the SCWE at Watts Bar Unit 1 through normal inspection activities, with a particular focus on licensee efforts to assure that the corrective actions being taken in response to the Apparent Cause Analysis, which include

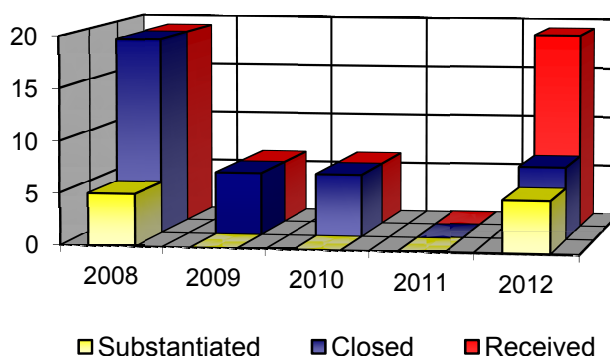
response to the nuclear safety culture survey, are completed and are effective at maintaining the SCWE and improving the licensee's awareness of the health of the environment for raising concerns.

### Sequoyah Units 1 and 2

The number of allegations received by the NRC from onsite sources regarding Sequoyah in CY 2012 (19) increased significantly from the number received in CY 2011 (0). The allegation receipt rate increased in the fourth quarter of CY 2012, the time period that correlates with a steam generator replacement outage on both units and a significant influx of contractors on site. Most of the allegations received in the third and fourth quarter were received from contract employees (current or former) and anonymous sources.

There was also an increasing trend of discrimination concerns received by the NRC (four in CY 2012, zero in CY 2011, one in CY 2010, two in CY 2009, and six in CY 2008). To date, none have been substantiated, however, a number have been settled using the NRC's Pre-Investigation Alternative Dispute Resolution process.

**FIGURE 8 - SEQUOYAH 1 & 2 ALLEGATIONS**



The Sequoyah Employee Concerns Program received many more nuclear safety/quality concerns requiring full investigation in CY 2012 than in CY 2011. With regard to the assessment of safety culture at TVA sites, the licensee conducted a fleet-wide nuclear safety culture survey in the fourth quarter of 2011 in response to a December 22, 2009 NRC Confirmatory Order. The survey results showed a decline in employee perceptions from those reported in 2009 at Sequoyah; however, ratings for SCWE and ECP improved. Specifically, there were notable improvements (5-10 percent) in the workforce's perception of the ECP's visibility, the competence and trustworthiness of the ECP staff, the fair and thorough nature of the ECP investigations, and the ECP's efforts to protect the identity of concerned individuals. Furthermore, the ratings for the corrective action program were adequate and improving. It is noted, however, that the survey participation rate was only 60 percent at Sequoyah, too low to support an assumption that the respondents were random or representative of the entire population. The survey identified an area for improvement in SCWE related to the perception that persons are treated negatively by peers when raising concerns.

TVA completed an Apparent Cause Analysis in October 2012 regarding potential reasons behind the increase in the numbers of allegations received by the NRC. The licensee determined there were weaknesses in the three primary avenues for raising concerns (providing concerns to supervisors, the corrective action program, and the ECP), as well as weakness in communications regarding the resolution of concerns raised through those processes. Furthermore, the licensee concluded that they failed to recognize signs of the weakening SCWE from several sources, such as ECP pulsing data, safety culture survey results, and NSRB observations. Corrective actions have been initiated.

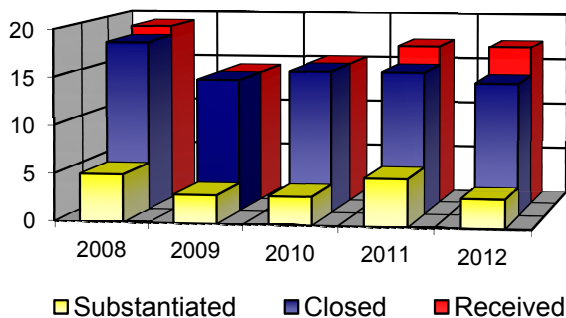
In summary, while there was a significant increase in the NRC receipt of allegations from onsite sources at Sequoyah in 2012, most were received in the fourth quarter of CY 2012, the time period that correlates with a steam generator replacement outage at both units and a significant influx of contractors on site. The license recognized the increase and did an extensive analysis to understand and address it. Based on that analysis and the recent nuclear safety culture survey results, the licensee appears to have developed a comprehensive corrective action plan. The NRC is maintaining its oversight of the SCWE at Sequoyah through normal inspection activities, with a particular focus on licensee efforts to assure that the corrective actions being taken in response to the Apparent Cause Analysis, which include response to the nuclear safety culture survey, are completed and are effective at maintaining the SCWE and improving the licensee's awareness of the health of the environment for raising concerns.

### Turkey Point Units 3 and 4

The NRC received the same number of allegations from onsite sources regarding Turkey Point Units 3 and 4 in CY 2012 (17) as in CY 2011. The attributes of the allegations received in CY 2012 are similar to those of CY 2011 with a concentration in the health physics area. The allegations received were primarily from current licensee employees and contractor employees, mostly regarding radiation protection issues. More allegations were received during the second quarter of CY 2012 than in any other quarter. Only one allegation concern was received by an anonymous source in CY 2012.

An analysis of the number and nature of the allegations received in CY 2012 shows no SCWE-related trends. Five allegation concerns were received in CY 2012 asserting a chilled work environment and one concern was received related to safety culture. None of the five chilling effect allegations were substantiated. There has been a slightly decreasing trend in discrimination concerns over the past five years. All of the 14 received during that time period are closed and none have been substantiated. Four discrimination concerns were received in both CY 2011 and CY 2012.

**FIGURE 9 - TURKEY POINT 3 & 4 ALLEGATIONS**



The latest NRC PI&R inspection at Turkey Point completed in August 2012 found an overall willingness of site workers to raise safety concerns and noted that workers were aware of the various avenues available for raising safety concerns. Site personnel interviewed by the NRC inspection team were not aware of other individuals who were afraid to raise concerns.

The Turkey Point ECP received more concerns in CY 2012 (about 50 more) than in CY 2011. Twenty-two concerns were associated with NRC-regulated activity. Additionally, the extended power uprate outage contractor administered its own ECP and received many concerns in CY 2012, but only one concern was associated with NRC-regulated activity. Licensee ECP staff attributed the concern volume primarily to the substantial number of contractors on site (the worker population at Turkey Point continues to remain very high due to the extended power uprate work that began in 2011). The Turkey Point ECP received fewer anonymous concerns in

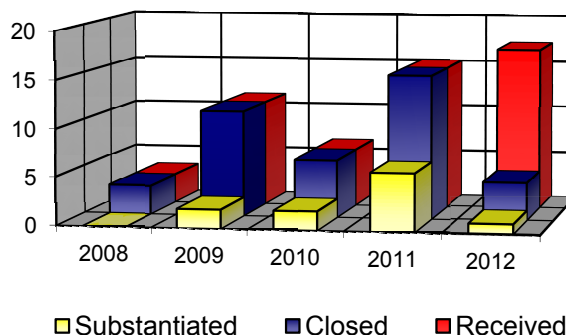
CY 2012 than in CY 2011, but received more SCWE-related concerns in CY 2012 (14), 10 of which were received from contractor employees. None of the SCWE-related concerns were substantiated by the ECP. The results of biweekly outreach sessions, involving approximately 1,600 employees, and engagement surveys in 2012 indicated improvement in management behaviors with regard to treating employees with respect.

In summary, given the substantial increase in the site population that began in late CY 2010 and continued through CY 2012 for the Turkey Point extended power uprate outage, the number and nature of allegations received regarding the site in CY 2012 are not indicative of a SCWE problem at the site. The NRC is maintaining its oversight of the SCWE at Turkey Point 3 and 4 through normal inspection activities and interactions with site management.

### Indian Point Units 2 and 3

The number of allegations received by NRC from onsite sources regarding Indian Point in CY 2012 increased slightly from the number received in CY 2011 (17 vs. 15). The attributes of the allegations received in CY 2012 are similar to those of CY 2011 with primary focus in the security area (13 of 17 allegations). Most of the allegations from onsite sources were received from current licensee employees also focused in the security area. The security-related concerns that did not involve equipment or technical matters involved discrimination, fitness-for-duty, fatigue and overtime, and access authorization matters related to security.

**FIGURE 10 - INDIAN POINT 2 & 3  
ALLEGATIONS**



One allegation concern was received in CY 2012 asserting a chilled work environment (the concern was not in the security area) and there were no specific allegation concerns received related to safety culture. More discrimination concerns were received in CY 2012 (5) than in CY 2011 (3). Of the five discrimination concerns received in CY 2012, four remain open and are being evaluated by the NRC (all related to the security area). None of the 10 discrimination concerns received in the past 4 years have been substantiated.

The most recent PI&R inspection at Indian Point completed in August 2011 found an overall willingness of site workers to raise safety concerns, and noted that workers were aware of the various avenues available for raising safety concerns. Site personnel interviewed by the PI&R inspection team were not aware of other individuals who were afraid to raise concerns.

Indian Point ECP trends in concerns received in CY 2012 were similar to previous years, with the exception of the security area. Specifically, ECP did not receive the volume of security issues in CY 2012 that it has in the past, in contrast to the large volume of security-related allegations that continue to be received by the NRC.

In summary, the number and nature of allegations received by the NRC from onsite sources at Indian Point 2 and 3 does not indicate a work environment issue with the overall population of

workers at Indian Point. However, the volume of security-related allegations/concerns received in CY 2012 suggests that focused attention is needed in the security area. This is emphasized by the fact that in CY 2012, the volume of security concerns raised internally via the Indian Point ECP was notably diminished, while the volume of security-related allegations submitted to the NRC remains high. The NRC is maintaining its oversight of the SCWE at Indian Point through normal inspection activities, with a particular focus on licensee efforts to assure that the volume of allegations related to the security area over the past few years has not adversely affected the SCWE.

### Allegation Trends for Selected Materials Licensees

The NRC Web site posts allegation statistics for certain fuel cycle facilities (see the appendix to this report). Because of the small number of allegations and the smaller work force sizes associated with the overwhelming majority of other smaller materials licensees, the potential for a licensee or contractor to identify an allegor is increased. For this reason, tables of statistics on allegations about materials licensees other than fuel cycle facilities have not been provided publicly or included in this report. None of the materials licensees or fuel cycle facilities received a sufficient number of allegations to discern a trend or pattern or to provide insights into the SCWE. Therefore, this report does not include more in-depth reviews of specific materials licensees.

### Allegation Trends for Selected Vendors

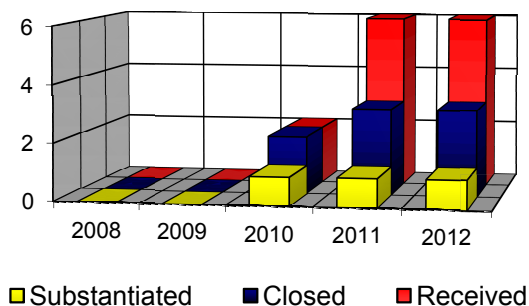
Neither this report nor the NRC Web site provides statistics by contractor or vendor for reasons similar to those outlined above regarding materials licensees. Nonetheless, the allegation trends of one vendor warrant discussion in this report.

#### Shaw Modular Solutions

The NRC received a significant number of allegations from onsite sources at Chicago Bridge & Iron's (CB&I) Lake Charles, Louisiana facility (formerly known as, and referred to in this report as, Shaw Modular Solutions (SMS)). From CY 2010 through CY 2012, into early 2013, the NRC received 19 allegations regarding SMS, 13 of which raised 19 separate concerns related to the SCWE at SMS. Over the same period, the NRC received a total of 54 vendor-related allegations from all sources. Therefore, approximately 35 percent of all vendor-related allegations received by the NRC during this period concerned the SMS facility. The 19 SMS SCWE-related allegation concerns involved 10 concerns alleging a chilling effect and nine concerns alleging retaliation after safety concerns were raised. The

NRC notes an increasing trend in the number of concerns related to SCWE at SMS from 2010-2012. Of the 19 chilling effect and discrimination/retaliation concerns, five were substantiated by the NRC and four were still open at the time this report was being written. These allegations were received from multiple concerned individuals.

**FIGURE 11 - SHAW MODULAR SOLUTIONS ALLEGATIONS**



The vendor conducted a SCWE assessment for SMS in February 2012. The assessment identified that a chilled work environment exists at SMS. The results indicated that a number of respondents are not confident they can raise a quality concern without fear of retaliation, know of someone who has experienced a negative reaction from management after raising a quality concern, and do not believe the SMS discipline policy is appropriate or fair. In all of these areas, the assessment results demonstrate higher negative response rates than industry norms.

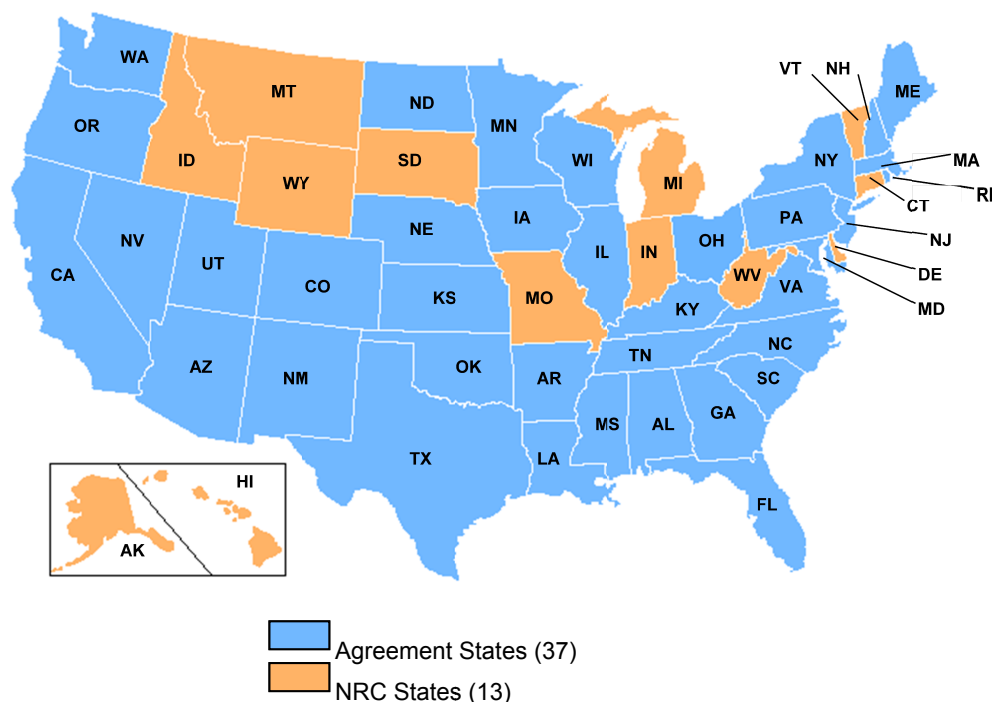
The NRC conducted three inspections and two allegation follow-up SCWE assessments at the SMS facility and, on the basis of its observations, reached the same conclusion as the vendor's assessment. The NRC identified (1) a perceived fear of retaliation for raising safety concerns, (2) that SMS employees mistrust management, (3) that craft employees lack adequate knowledge on proper use of the corrective action program, and (4) that the corrective action program is ineffective at resolving conditions adverse to quality. Furthermore, the NRC observed that employees most knowledgeable about what constitutes a nuclear safety issue were the most hesitant to raise such concerns. These NRC observations resulted in the substantiation of five allegations of a chilled work environment. Furthermore, the NRC observed that in the year that followed the vendor's assessment, only minimal actions were taken by the vendor to remedy the identified chilled work environment at SMS and that they had not been effective in remedying the problems.

Lastly, the NRC identified issues in the effectiveness of the corrective action program. Specifically, the NRC found that SMS site employees do not understand that a corrective action program is a tool to be used in correcting conditions adverse to quality. This lack of understanding is most pronounced among craft employees, who rarely used the corrective action program to document nonconforming items.

In summary, although the NRC did not identify unreported safety issues in its assessments, NRC staff determined some employees are reluctant to raise safety issues to their management. As this report was being written, the NRC was discussing the need for heightened regulatory oversight to ensure the vendor takes timely and effective actions to address existing SCWE issues and improve the environment for raising concerns at the facility. On April 18, 2013, the staff issued a Chilling Effect Letter to this vendor citing the agency's concerns about the SCWE at the Lake Charles, LA site, and requesting information regarding the vendor's plans to address those concerns (ADAMS Accession No. ML13092A077).

### **Agreement State Trends**

Under the authority granted in Section 274b of the Atomic Energy Act, as amended (the Act), the NRC may relinquish its authority to regulate certain byproduct, source, and limited quantities of special nuclear material to a State government through a mutual agreement. A State that has entered into this agreement with the NRC is called an Agreement State. Before entering into this agreement, States must first demonstrate that their regulatory programs are adequate to protect public health and safety and are compatible with the NRC's program. Figure 12 depicts the 37 Agreement States.

**FIGURE 12 - AGREEMENT STATES**

The NRC has statutory responsibility to review periodically the actions of the Agreement States to ensure that they maintain programs adequate to protect public health and safety and are compatible with the agency's program. This authority is granted under Section 274j of the Act. The NRC uses the Integrated Materials Performance Evaluation Program (IMPEP) to satisfy its statutory responsibility. More information on the NRC's Agreement State Program or IMPEP is available on the NRC's Office of Federal and State Materials and Environmental Management Programs Web site at <http://nrc-stp.ornl.gov/>.

In CY 2012, the NRC conducted routine IMPEP reviews of eight Agreement State Programs. The review teams evaluated the effectiveness of the Agreement State Programs' responses to concerns from external sources by reviewing the casework and documentation for 42 cases cumulatively received by all of the programs reviewed. The NRC referred 18 of the 42 cases reviewed to the Agreement State Programs; the States received the other concerns directly from concerned individuals. In all Agreement State Programs, except one, the review teams concluded that the States consistently took prompt and appropriate action in response to concerns raised. In all Agreement State Programs, except one, the review teams noted that the States documented the results of their investigations and closeout actions, which included notifying concerned individuals of the outcomes of the investigations when the individuals' identities were known. Review teams determined that the States reviewed in CY 2012 adequately protected the identity of any concerned individual who requested anonymity. Overall, with one exception, the results of the CY 2012 IMPEP reviews demonstrate that the Agreement States continue to rank response to concerns from external sources as a high priority in protecting public health and safety. The Agreement State Program that was found by the review team to be unsatisfactory in the program's review and response to allegations, Georgia, is implementing recommendations to strengthen its allegation program and the NRC staff is closely monitoring those actions.

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**CONCLUSIONS**

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More allegations were received in CY 2012 than in CY 2011. The 5 percent increase reflects significant activity at a limited number of sites. The largest percentage of concerns received nationwide were discrimination concerns, which increased slightly from the number received in CY 2011. Notable increases were also seen in chilling effect, corrective action, maintenance, and engineering concerns. While the number of security-related concerns also remained at a high level, most of the security concerns raised involved only a small number of reactor sites.

The analyses of allegations have provided insights into the SCWE at a number of facilities. The trends for reactors and materials facilities do not suggest a concern about the environment for raising concerns; however, the NRC continues to closely monitor one vendor facility to ensure timely and effective actions are taken to address existing SCWE issues. One Agreement State Program, Georgia's, was found unsatisfactory and the NRC is monitoring the State's actions to strengthen its allegation program.

The agency's Early ADR process resulted in six cases in which discrimination allegations were settled successfully between the parties before the start of an NRC investigation. The staff believes that voluntary dispute resolution by the parties using the communication opportunities afforded in Early ADR can stem the inherent damage such disputes have on the SCWE more quickly than an investigation.

## APPENDIX

**ALLEGATION STATISTICS  
OPERATING REACTORS AND FUEL CYCLE FACILITIES**

**OPERATING REACTOR ALLEGATIONS RECEIVED FROM ONSITE SOURCES**

Site	2008	2009	2010	2011	2012
ARKANSAS 1 & 2	6	3	4	3	6
BEAVER VALLEY 1 & 2	3	1	2	1	1
BRAIDWOOD 1 & 2	3	3	4	2	2
BROWNS FERRY 1, 2 & 3	18	8	12	11	16
BRUNSWICK 1 & 2	2	5	1	3	6
BYRON 1 & 2	8	9	6	3	3
CALLAWAY	2	2	3	1	5
CALVERT CLIFFS 1 & 2			3	1	1
CATAWBA 1 & 2	3	2	2	3	3
CLINTON	1	4	4	1	1
COLUMBIA PLANT	1	9	4	5	1
COMANCHE PEAK 1 & 2	5	1	2	3	2
COOK 1 & 2	5	5	3	5	
COOPER	3	2	5	5	3
CRYSTAL RIVER	2	4	4	1	1
DAVIS-BESSE	1		2	4	
DIABLO CANYON 1 & 2	13	15	12	9	5
DRESDEN 2 & 3	8	5	1	2	
DUANE ARNOLD	2	1	1	1	2
FARLEY 1 & 2	5	6	7	12	9
FERMI	3	3	3	3	1
FITZPATRICK	2	3	2	2	2
FORT CALHOUN	1	4	5	4	3
GINNA	4	2	4	10	4
GRAND GULF	4	2	5	3	10
HARRIS	1	2	5	3	6
HATCH 1 & 2	7	5	8	4	5
INDIAN POINT 2 & 3	3	11	6	15	17
KEWAUNEE		3		1	1
LASALLE 1 & 2	1		1	2	
LIMERICK 1 & 2	3	14	2	3	5
MCGUIRE 1 & 2	3	3	6	5	1
MILLSTONE 2 & 3	8	5	4	11	9
MONTICELLO	2	2		3	2
NINE MILE POINT 1 & 2	1		1	5	2
NORTH ANNA 1 & 2	1	1	2	1	1
OCONEE 1, 2, & 3	1	1	11	4	6
OYSTER CREEK	6	14	4		3
PALISADES	6	8	3	5	5
PALO VERDE 1, 2, & 3	17	15	16	8	7

Site	2008	2009	2010	2011	2012
PEACH BOTTOM 2 & 3	3	8	4	3	1
PERRY	6	9	2	5	10
PILGRIM	8	1	5	5	2
POINT BEACH 1 & 2	5	4	8	6	4
PRAIRIE ISLAND 1 & 2	5	14	8	7	9
QUAD CITIES 1 & 2	4	2		1	1
RIVER BEND	8	5	7		
ROBINSON	1		4	6	4
SALEM/HOPE CREEK	11	7	6	4	5
SAN ONOFRE 2 & 3	18	33	57	23	28
SEABROOK	10	2	1	7	5
SEQUOYAH 1 & 2	19	6	6		19
SOUTH TEXAS 1 & 2	8	12	5	5	8
ST LUCIE 1 & 2	6	15	12	16	7
SUMMER	2	3	1	4	1
SURRY 1 & 2	2	2	6	4	1
SUSQUEHANNA 1 & 2	32	15	12	22	21
THREE MILE ISLAND	2	9	1	3	
TURKEY POINT 3 & 4	19	14	15	17	17
VERMONT YANKEE	1	2	3	2	
VOGTLE 1 & 2	1	2	4	12	5
WATERFORD	4	3	4	2	4
WATTS BAR 1	9	3	2	5	21
WOLF CREEK	7	6	2	4	5

**FUEL CYCLE FACILITY ALLEGATIONS RECEIVED FROM ONSITE SOURCES**

<b>Site</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
AMERICAN CENTRIFUGE PLANT	2				1
BWX TECHNOLOGIES, INC.	1		2	1	
GLOBAL NUCLEAR FUEL	1	1	6	6	5
HONEYWELL	1	4	7	16	3
LOUISIANA ENERGY SERVICES	1	11	29	6	12
NUCLEAR FUEL SERVICES, INC.	3	3	5	10	4
PADUCAH	5	3	4	5	6
PORTSMOUTH	2	1			
SHAW AREVA MOX SERVICES	2	1	1		4
WESTINGHOUSE	2	4	2		1
YUCCA MOUNTAIN		1	5	2	