

# Nevada Dry Cleaner ERP Final Report

Exploring the Environmental Results Program on a multi-agency level to improve environmental performance in the dry cleaning industry.

Vevada Division of Environmental Protection and University of Nevada, Reno Business Environmental Program

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# Table of Contents

EXECUTIVE SUMMARY	2
1.0 PROJECT PURPOSE AND GOALS	4
Goals of the Nevada ERP were to:	4
2.0 PROJECT IMPLEMENTATION	6
Methodology and Design:	6
2.1 WASHOE COUNTY	7
Task 1: Stakeholders	7
Task 2: Inspections by Municipal Agencies	
Task 3: Self-Certification Process	
Task 4: Data Management	9
2.2 CLARK COUNTY	11
Task 1: Stakeholders	
Task 2: Inspections by municipal agencies	11
Task 3: Self-Certification Process	
Task 4: Data Management	
3.0 HOSTING NATIONAL ERP INFORMATION EXCHANGE MEETING	14
4.0 LESSONS LEARNED	
5.0 PROGRAM CONCLUSIONS	

# **EXECUTIVE SUMMARY**

In 2006, the Nevada Division of Environmental Protection (NDEP) proposed to replicate and further evaluate the dry cleaning environmental results program (ERP) developed by Massachusetts and subsequently implemented in Michigan. Nevada's proposal offered a very unique approach because the State sought to further innovate on the ERP and demonstrate a new application of the dry cleaner program by engaging local single media agency programs into an integrated, multi-agency, multi-media ERP.

Although dry cleaners were not known to have an abundance of compliance issues, there were some historic issues of perchloroethylene (perc) groundwater contamination and sewer sampling had found elevated levels of PCE in sewers downstream of dry cleaners. In addition to ensuring compliance, an ERP offered the opportunity to increase dry cleaner awareness of the environmental issues of concern surrounding perc and best industry practices to prevent perc pollution. Subject to regulation by local Publicly Owned Treatment Works (POTW) pretreatment programs, local air quality management programs, and district health department solid waste management programs under contract with NDEP, dry cleaners were also a small business sector ripe for a coordinated multi-media ERP.

A locally implemented ERP was first developed in Washoe County and the process and lessons learned from the Washoe County ERP were used to develop a similar multi-agency, multi-media program in Clark County.

By engaging in the project, state and local agencies have not only gained experience in developing and implementing an ERP but they have also gained experience in multi-agency collaboration to address improvement of environmental regulation and environmental performance in a particular sector. As was foreseeable, such a multi-agency effort was not without the typical institutional challenges. What could not be foreseen, however, was the severe economic collapse experienced by Nevada in the "Great Recession" and the attendant cutbacks in regulatory agency personnel as local agencies sought to reduce operating costs. (The Great Recession refers to the economic downturn in the United States beginning in December 2007 and ending in June 2009 and which is regarded as the longest and deepest downturn for the US economy since the Great Depression). Going to multi-media inspections at the local level was cause for concern amongst single-media inspectors who perceived that a consolidated multi-media approach to inspections could ultimately lead to workforce reductions; such concern had a perceptible effect on consistent local buy-in for the ERP.

The lead applicant and recipient of the ERP grant provided by the US Environmental Protection Agency (US EPA) was the NDEP Bureau of Waste Management with coordination of the ERP provided by the Nevada Small Business Development Center (NSBDC) Business Environmental Program (BEP) under a sub-grant (state inter-local contract). BEP worked with the state and local environmental programs to: establish a baseline of dry cleaner environmental compliance and performance; provide outreach and assistance to dry cleaners; develop a multi-media selfcertification program for dry cleaners; and manage a follow-up assessment to measure and report improvements in dry cleaner compliance and environmental performance in the metropolitan areas of Reno/Sparks in Washoe County, and Las Vegas/North Las Vegas/Henderson in Clark County, Nevada.

The ERP addressed regulatory requirements established under the Resource Conservation and Recovery Act (RCRA), the Clean Water Act (CWA), and the Clean Air Act Amendments (CAAA). As such, the Nevada dry cleaner ERP represented not only a first-of-its-kind multimedia effort for NDEP but also a national first-of-its-kind multi-agency collaboration for inspection and enforcement of environmental regulations with a predominantly small business industry sector.

Most importantly, the project has been widely acknowledged as having improved dry cleaner knowledge of environmental regulations and industry best practices to prevent perc pollution. Although improvements were not necessarily "statistically significant", that was not surprising given this was an industry generally considered to be in good regulatory standing prior to the implementation of the ERP.

# 1.0 PROJECT PURPOSE AND GOALS

The population of Nevada is predominantly urban and concentrated in the metropolitan areas of Reno/Sparks in Washoe County and Las Vegas/North Las Vegas/Henderson in Clark County. Eighty-seven percent of Nevada's population resides in these two counties. These areas were selected for the ERP implementation because of the dry cleaner concentration in these communities and the industry being subject to multi-agency regulation by local publicly owned treatment works (POTW) pretreatment programs, local air quality management programs, and solid waste management programs of the local health departments operating under contract with NDEP for limited inspections of hazardous waste management.

In the years preceding the ERP, dry cleaners had become a focus of NDEP and local agencies in Washoe County. The attention to the dry cleaning sector resulted in state and local agencies working together in seeking to improve environmental performance of the dry cleaners. That experience, and the potential for further collaboration, provided a unique opportunity to build on the state ERP experiences of Massachusetts and Michigan, and to undertake strategic innovation to develop a locally implemented ERP in Washoe County. A phased approach was planned with the process and lessons learned from the Washoe County ERP to be utilized to develop a similar multi-agency, multi-media program in Clark County, Nevada.

For NDEP, the adoption of a dry cleaner ERP required collaboration with county and city regulatory agencies to transform local single-media agency programs into an integrated, multi-agency, multi-media ERP. Nevada's engagement of local, single-media agency programs in this way was a unique concept not previously tested by any other state ERPs.

The bottom line focus, however, remained on the dry cleaning industry and its environmental performance. The Nevada ERP for dry cleaners was developed to improve industry awareness of all, multi-media, environmental regulatory requirements and to assist in the adoption of pollution prevention measures and best management practices for the industry.

#### Goals of the Nevada ERP were to:

- Provide compliance assistance for facilities within the perchloroethylene (perc) dry cleaner sector
- Utilize existing state and local regulatory staff resources for multi-media (versus singlemedia) inspections
- Develop dry cleaner multi-media inspection and compliance assistance tools and training, and compliance self-certification forms suitable for Washoe and Clark County
- Work with compliance inspection personnel to develop the multi-media inspection forms and provide training on the use of the forms to ensure the collection of high quality information during inspections
- Encourage the use of pollution prevention activities and Best Management Practices (BMPs)
- Manage the data collected from inspections and self-certifications and the data collection process to measure the effect of the ERP program on dry cleaner compliance and environmental performance, and estimate quantities of emissions prevented or reduced

 Collaboratively work with industry stakeholders, the U.S. Environmental Protection Agency (US EPA), and local environmental agencies to engage the local agencies and dry cleaning facilities in the ERP program to improve and enhance their environmental compliance and environmental performance

# 2.0 PROJECT IMPLEMENTATION

The process for implementing the Nevada ERP for dry cleaners started with the establishment, through initial inspections, of a baseline of dry cleaner compliance and performance. This was followed by outreach and assistance to dry cleaners provided by the Nevada Small Business Development Center (NSBDC) Business Environmental Program (BEP), the provision of a multi-media self-certification program, and a follow-up round of assessments to measure improvements in dry cleaner compliance and environmental performance.

The ERP for Reno/Sparks and the Washoe County area began in 2007 and concluded in 2010. Phase two of the ERP, which focused on Las Vegas/North Las Vegas/Henderson and the Clark County area, began in 2009 and concluded in 2011.

#### **Methodology and Design:**

The Nevada Dry Cleaners ERP consisted of the following principal tasks in both Washoe and Clark Counties:

- 1. Establish for each county a state/local agency ERP workgroup
- 2. Announce the project and create an ERP stakeholder focus group
- 3. Develop a multi-media inspection checklist and environmental business practice indicators (EBPIs)
- 4. Train inspectors on using the checklist
- 5. Conduct baseline inspections (local agencies)
- 6. Compile inspection results
- 7. Develop a compliance manual and compliance forms for self-certification
- 8. Deliver Dry Cleaning compliance/BMPs workshop with training on manuals and form
- 9. Conduct follow-up inspections

The methodology used was established by the Massachusetts and Michigan programs. The success of these programs led Nevada to utilize this design as the basis for the Nevada ERP.

One challenge to implementing a multi-media approach, which was experienced in other states as well, was the existing "stove pipe effect" of environmental media regulations and how these regulations are managed and enforced by the agencies. Agencies, and media programs within agencies, are typically not comfortable with conducting operations outside of their jurisdiction or purview because they typically lack the authority to extend beyond their designated media. Because NDEP Bureau of Waste Management had limited direct authority over non-waste issues as well as the local programs, and BEP had even less influence over the local programs, the municipal inspectors could not always be convinced to conduct multi-media inspections. Coordinating the schedules of inspectors from multiple agencies to accommodate multi-media inspection teams can be time-consuming and a challenge even in the best of times. With the economic downturn, local agency staff was simply trying to get their jobs done and participation in a time-consuming innovative effort became less and less of a priority.

#### 2.1 WASHOE COUNTY

The complete ERP cycle for Washoe County Dry Cleaners was conducted from 2007 through 2010. This work took longer to implement than originally conceived in 2006. Numerous factors influenced the extended timeframe of the project. Changes in staffing at BEP and difficulties with the ERP results analyzer software tool developed by Tetra Tech for Massachusetts and Colorado were a couple of internal factors (ultimately, we chose to use the analyzer developed by Michael Crow Environmental). External factors that appeared to influence the project were the downturn in the economy and a proposal by the Washoe County Health District Air Quality Management Division to prohibit perchloroethylene (perc) in Washoe County. On the latter issue, the Air Quality Management Division held a public workshop regarding the proposed regulation in September 2009 and, based on comments received, the proposed prohibition was withdrawn.

Municipal Jurisdiction	Regulatory Authority	County
Washoe County Health District Solid	RCRA Hazardous Waste authority through	Washoe
Waste Management Division	contract with NDEP	
Washoe County Health District Air	Clean Air Act authority through delegation from	Washoe
Quality Management Division	EPA Region 9	
City of Reno Public Utilities	Clean Water Act Industrial Wastewater Authority	Washoe
Environmental Control Section	through delegation from EPA Region 9	
City of Sparks Public Utilities	Clean Water Act Industrial Wastewater Authority	Washoe
Environmental Control Section	through delegation from EPA Region 9	

#### Task 1: Stakeholders

BEP convened a stakeholder group of local inspectors in Washoe County to engage in the development of needed materials, project methodology, and facility inspections plans in July 2007. There was agreement among the inspectors that the ERP would demonstrate and confirm the sense that Washoe County dry cleaners were already maintaining an excellent compliance status and were aware of the environmental regulations governing their facilities. The inspectors provided information and feedback on their respective inspection forms; BEP synthesized this material to produce a multi-media checklist to be utilized for the inspection of dry cleaners under the ERP.

Nevada has an unstructured dry cleaners association representing this business sector. A Korean dry cleaners association exists, but refrained from formally participating in the stakeholder process in Washoe County. As a group, Washoe County dry cleaners are more inclined to interact by networking as colleagues, rather than through a formal association, when an issue arises. Against this backdrop, a second stakeholder group comprised of individual dry cleaning business owners and operators was engaged in September 2007 to review compliance material development, help recruit ERP participants, and help implement the self-certification program. This group was initially skeptical of the motives behind the ERP, but nevertheless provided excellent guidance for future communication with individual dry cleaners. The stakeholders ultimately reviewed the draft self-certification manual, the letter inviting dry cleaners to participate in the ERP program, and they assisted with promoting the program.

Both stakeholder groups were utilized to provide outreach to perc dry cleaners in Washoe County. These key business representatives and agency personnel engaged in direct discussion to seek the involvement of Washoe dry cleaners in the ERP.

#### Task 2 – Inspections by Municipal Agencies

The initial round of inspections by municipal inspectors was initiated in the first quarter of 2008. The checklists developed from the stakeholder meetings were used by the hazardous waste inspectors and wastewater utility inspectors. The air quality inspectors did not agree to modify their inspection process in favor of using the ERP inspection checklists asserting that it could adversely affect their budgets and established protocols. The inspectors resisted the idea of conducting multi-media inspections as a team and conducted their visits separately. Even prior to the economic downturn – which exacerbated these issues – it was felt that the inspectors perceived multi-media inspections as a potential threat to their positions and budgets.

The inspector training offered by BEP staff regarding the inspection process was also greeted with a degree of skepticism. Even with training, it appeared that inspectors felt a lack of legal authority to extend to multi-media inspections and felt unqualified to examine operational management activities (i.e., judging the adoption of industry best management practices).

In spite of the challenges noted above, collaboration between the inspectors was excellent and the ERP project benefited from their active assistance with promoting the program.

# **Task 3 – Self-Certification Process**

The following activities were coordinated by BEP and completed for the self-certification process:

- Developed a multi-media perc dry cleaner compliance manual with the assistance of the stakeholder groups. The manual provided information on best management practices and identified each environmental regulatory requirement that perc dry cleaners in Washoe County must comply with
- Developed a training curriculum to educate perc dry cleaners in Washoe County on best management practices and environmental compliance requirements
- Provided a training seminar to Washoe County dry cleaners to present the curriculum and the compliance manual
- Distributed the compliance manual to dry cleaning facilities that did not attend the training seminar
- Conducted outreach, with assistance of the stakeholder groups, to provide compliance assistance to dry cleaners and to provide assistance with completion of the selfcertification/return to compliance forms. Dry cleaners were instructed to submit the completed forms to the Nevada Division of Environmental Protection (NDEP) by August 7, 2009 to be eligible to participate in the self-certification program for Washoe County
- Provided Certificates of Participation to the dry cleaners who participated in the voluntary self-certification process

The training for Washoe County PCE dry cleaners was conducted on April 15, 2009 with 15 dry cleaners attending the presentation. The dry cleaners that did not attend the training were mailed the self-certification manual and contacted by BEP staff to provide over-the-phone training and information about the voluntary program.

This personalized training resulted in 75 percent of Washoe County's dry cleaners participating in the voluntary self-certification process. The self-certification package mailed to facilities alerted dry cleaners that if they completed and returned the forms NDEP would provide a certificate recognizing their participation in this program. In September 2009, BEP sent a thank you letter and certificates to 18 facilities that completed and returned the self-certification forms. In general, the NDEP received positive comments about the self-certification questions (i.e., easy to understand and follow); however, we also discovered some certification questions that needed to be improved/changed as a result of discussions we had with dry cleaners and the stakeholders.

A review of the submitted self-certification checklists indicated industry confusion with air permitting regulations; although not confusion that would affect actual compliance. It was the distinction between the three source categories (i.e., existing small area source, existing large area source, new area source) that was confusing to the shops, and the bottom line was that all facilities were existing small area sources. Dry cleaners routinely asked BEP for assistance in answering questions regarding their air permit category. This was an area identified for improved guidance and re-wording of the questions.

#### Task 4: Data Management

The first step in managing the data was to develop a database of perc dry cleaning facilities in Washoe County. This was accomplished with the assistance of the municipal agencies that issue permits and conduct inspections of the dry cleaners in Washoe County. The initial list indicated 30 facilities utilized perc. However, this list was reduced to 24 facilities when the second set of inspections was conducted in 2010. Four facilities went out of business and two facilities converted to a petroleum-based product for cleaning.

The data management task was originally designed to utilize the Environmental Results Program analyzer developed by Tetra Tech. The analyzer provides data storage, management and basic comparisons of inspection results to help ascertain the impact the Environmental Results Program has on the dry cleaning business sector. A copy of the analyzer was obtained and the inspection data was entered for both the initial and follow-up (initial round and second round) inspections by the municipal inspectors. The copy of the analyzer obtained by BEP, however, contained a programming error that BEP personnel were unable to repair. BEP was subsequently able to acquire an Excel-based spreadsheet analyzer developed by Michael Crow Environmental. With guidance from Mr. Crow, BEP was able to input and analyze the inspection data.

Since this was a census approach with all of the perc dry cleaners being inspected before and after the trainings and self-certification process, the statistical aspect of the analyzer would be

minimally utilized. Furthermore, at the start of this project, the municipal inspectors indicated that all dry cleaners were already in compliance.

Analysis of the baseline and post-certification inspection data supports this assertion regarding good compliance; the follow-up inspections indicated that all of the facilities were determined to be in compliance with the respective regulations/permits. In addition, from a self-analysis perspective, the self-certification checklists that were submitted by individual shops did not contain any "return to compliance" forms.

Though the data did not indicate a change in compliance rate, there is evidence nonetheless that, as a result of the ERP, the dry cleaners were more cognizant of their responsibilities and attuned to their environmental performance and industry best management practices. This is demonstrated by the fact that half of the environmental business performance indicators (EBPIs) indicated a statistically significant positive improvement.

Environmental business performance indicators were selected after a discussion with the local multi-agency governmental inspection personnel. The EBPI's were selected with the idea that businesses complying with these questions were more likely to be current with their information and understanding of applicable environmental laws. As is the intent with ERP, the consensus was that businesses doing well with the EBPI's would require less oversight thus allowing inspectors to focus their efforts towards the remaining businesses in the industry sector.

The thirteen (13) questions designated as EBPI's consisted of five (5) questions each for air and waste regulations and three (3) questions associated with wastewater. The performance change between the inspections revealed 6 of the 13 showed statistically significant change. Five (5) EBPI's were positive changes and one (1) was negative. Overall, the scoring change between the initial visits and the follow-up inspections was positive.

#### 2.2 CLARK COUNTY

The Clark County ERP for dry cleaners closely followed the approach established for Washoe County. To initiate the process, BEP convened the regulatory agencies to discuss the project and excellent guidance was provided by staff from the various agencies. Dry cleaners, including representatives of the Korean Dry Cleaning Association, were invited to review the guidance materials and inspection checklists.

#### Task 1: Stakeholders

The agencies contacted to partner in the Clark County ERP for dry cleaners included Southern Nevada Health District (SNHD), the cities of Las Vegas, North Las Vegas and Henderson. The Southern Nevada Health District is the regional authority managing air quality permitting and under contract with NDEP to perform hazardous waste inspections. The individual cities are responsible for the wastewater discharge permitting.

Municipal Jurisdiction	Regulatory Authority	County
Southern Nevada Health District Solid	RCRA Hazardous Waste authority through	Clark
Waste Management Authority	contract with NDEP	
Department of Air Quality	Clean Air Act authority through delegation from	Clark
Management and Environmental	EPA Region 9	
Management		
City of Las Vegas	Clean Water Act Industrial Wastewater Authority	Clark
City of North Las Vegas	through delegation from EPA Region 9	
City of Henderson, Dept. of Public		
Utilities		

In addition to working with the multiple regulatory agencies, the Korean Dry Cleaners Association and United Fabricare Supply, Inc., an industry vendor, volunteered to review the training documents and help recruit dry cleaners to participate in the self-certification process. Although there was limited success in recruiting participants, both organizations disseminated the materials within the dry cleaning community.

#### Task 2: Inspections by Municipal Agencies

BEP staff contacted and met with representatives of the local agencies to describe the voluntary ERP and obtain their cooperation and partnership in the project. The municipal wastewater agencies concurred with the process and contributed to development of the best management practices checklist, but refrained from further participation. The dry cleaning industry sector was viewed as not adversely impacting the wastewater system. The municipal wastewater regulations prohibited the discharge of PCE to the sewer. The wastewater agencies conduct inspections of dry cleaners but consider the industry's impact on the sewer system as *de minimus*. Additionally, the city agencies had limited resources available for conducting inspections and were not able to take on the additional workload presented by ERP.

The SNHD Department of Air Quality was very receptive to the ERP for dry cleaners and their participation in the project was excellent up to the point when SNHD's contact person moved to another position. That personnel change, and the subsequent delay in re-filling the position, ultimately led BEP to implement the ERP without an air permitting aspect included for Clark County.

Without the support of the Department of Air Quality, the inspection universe was limited to 59 dry cleaners using perc and air quality questions were typically excluded from the pre and post assessment process. One SNHD waste inspector ultimately agreed to take on the role of inspecting dry cleaning facilities and to review for hazardous waste and wastewater compliance as well as overall implementation of industry best management practices. The inspector was provided training on wastewater issues and best practices prior to conducting the inspections.

The universe of dry cleaning facilities visited during the ERP was not only limited by manpower issues, it was also complicated by the transient nature of the facilities and the difficulty in identifying and keeping track of the businesses – particularly as Nevada entered the "Great Recession". As shopping centers and strip malls were suddenly experiencing near 100 percent vacancy, dry cleaning establishments seemed to appear and disappear from shopping centers and storefront locations very quickly. Also, some dry cleaning establishments initially identified as using perc were, upon initial inspection, found to be using alternative cleaning technologies.

#### Task 3: Self-Certification Process

The following activities were coordinated by BEP and completed for the self-certification process:

- Developed a multi-media perc dry cleaner compliance manual with the assistance of the stakeholder groups. The manual provided information on best management practices and identified each environmental regulatory requirement that perc dry cleaners in Clark County must comply with
- Developed a training curriculum to educate perc dry cleaners in Clark County on best management practices and environmental compliance requirements
- Provided a training seminar to Clark County dry cleaners to present the curriculum and the compliance manual
- Distributed the compliance manual to dry cleaning facilities that did not attend the training seminar
- Conducted outreach, with assistance of the stakeholder groups, to provide compliance assistance to dry cleaners and to provide assistance with completion of the selfcertification/return to compliance forms. Dry cleaners were instructed to submit the completed forms to the Nevada Division of Environmental Protection (NDEP) by July 31, 2010 to be eligible to participate in the self-certification program for Clark County
- Provided Certificates of Participation to the dry cleaners who participated in the voluntary self-certification process

**US EPA ARCHIVE DOCUMENT** 

The training for Clark County perc dry cleaners was conducted on March 24, 2010 with seven dry cleaners attending the presentation. On March 29, 2010 one dry cleaner was provided onsite training per an individual request and on July 10, 2010 seven dry cleaners attended an additional training offered through the Korean Dry Cleaners Association. The dry cleaners that did not attend the training were mailed the self-certification manual and contacted by BEP staff to provide over-the-phone training and information about the voluntary program. The self-certification package mailed to facilities alerted dry cleaners that if they completed and returned the forms NDEP would provide a certificate recognizing their participation in this program. In general, the NDEP received positive comments about the self-certification questions (i.e., easy to understand and follow).

NDEP received 15 completed self-certification checklists. Each of the participants were sent a Certificate of Participation and offered site specific assistance for their efforts. A review of the submitted self-certification checklists showed no "return to compliance" forms which would indicate that participating dry cleaners in Clark County considered themselves in compliance with all of the applicable requirements. This was supported anecdotally by the inspector who communicated to BEP staff that the dry cleaners who participated in the training and the self-certification process were more aware of the regulatory requirements and significantly easier to inspect.

#### Task 4: Data Management

BEP used the experience acquired during the Washoe County ERP process to manage the data. BEP utilized the Excel spreadsheet analyzer developed by Michael Crow Environmental to manage the inspection and self-certification checklist data. Mr. Crow was exceptionally helpful and provided excellent guidance in utilizing the analyzer and evaluating the data.

The data from the first and second rounds of inspections for 59 dry cleaners was entered in the analyzer. Since the questions only addressed the hazardous waste and wastewater compliance and best management practices, it is difficult to fully assess the full multi-media impact of the Self-Certification Handbook and training provided to the dry cleaner community in Las Vegas. While the results for individual questions somewhat unexpectedly vary between the initial and follow-up inspections, the analyzer does show overall positive performance change for the visited dry cleaning facilities.

BEP further analyzed the data and determined that dry cleaners completing the voluntary selfcertification process typically scored better in the follow-up inspections than those dry cleaners who did not self-certify. As would be expected, the outreach and educational materials did improve dry cleaner knowledge of the regulations and adoption of best practices which led to overall improved performance relative to other cleaners who did not fully participate in the ERP.

Nevada ERP for Dry Cleaners Final Report

# 3.0 HOSTING NATIONAL ERP INFORMATION EXCHANGE MEETING

During the course of the Nevada ERP for dry cleaners, BEP also hosted a national meeting of the States ERP Consortium at the University of Nevada, Reno campus on September 7-8, 2008. This information exchange meeting drew state and US EPA representatives to Reno from across the nation and additional attendees were able to participate remotely via teleconference and videoconference technology.

A total of forty-eight people from 14 different states participated in the conference. Thirty-six people attended the Consortium meeting in Reno, including Leo Drozdoff, Administrator of the Nevada DEP, and Betsy Shaw, Director of US EPA's National Center for Environmental Innovation. An additional eight people participated via video conferencing and four participated via conference call. The topics included a demonstration of the data management tools produced by Tetra Tech; a states roundtable discussion of the status and challenges faced by each during implementation of their ERP work; and work group sessions for building support for the ERP process (including reporting, data tools for analysis, and information sharing).

#### 4.0 LESSONS LEARNED

Part of the reason for conducting the Nevada dry cleaners ERP was to explore the delivery of multi-media ERP through multiple agencies at the state, county, and city levels. This has particular applicability to the Region 9 states where many local agencies are delegated responsibility for implementing environmental regulatory programs. Attempting to coordinate multiple agencies, particularly without the ability to offer carrots or wield sticks, proved very challenging. When the "rubber hit the road", while all the agencies were willing to offer carrying out the project.

As other states have also reported, top-down commitment to ERP is a required ingredient for a high level of sustained success. In the Nevada ERP experience, we saw this not only at the local agency level but also from an unexpectedly higher level. When it was rumored in the fall of 2010 that US EPA would be discontinuing its support for the States ERP Consortium, the follow-up round of assessments had yet to be completed in Clark County. At some level, this created a bit of a sense of "why bother?" among stakeholders if it was true that even EPA's commitment to the ERP process was dwindling (but the assessments were ultimately completed nevertheless).

Another interesting observation had to do with the existing levels of interaction between dry cleaners and environmental regulatory agencies prior to the initiation of the Nevada ERP. One of the hypotheses going into this project was that greater performance improvements would be seen in Clark County versus Washoe County due to the fact that prior to implementing the Nevada ERP, Washoe County dry cleaners had already received a significant amount of attention from the various agency inspection personnel. Surprisingly, however, when looking at the 13 environmental business performance indicators (EBPIs), there was a statistically significant level of improvement in six of the thirteen EBPIs amongst Washoe County dry cleaners, while none of the EBPIs showed a statistically significant level of improvement amongst dry cleaners in Clark County.

This contrary result can quite possibly be explained by that level of prior interaction – and the resulting rapport and trust developed between the dry cleaning facility owners and operators and the inspection personnel. That existing level of rapport and trust in Washoe County is most likely the reason why 76 percent of the dry cleaners chose to voluntarily participate and self-certify in the ERP, while only 14 percent of the dry cleaners in Clark County did the same. Pollution prevention programs consistently report the need to establish a relationship with a business to ensure implementation of environmental performance improvements; and it appears ERP is no different.

Overall, this was also an industry sector generally regarding as being substantially in compliance even before the ERP began. While there was certainly room for improvement, it stands to reason that there simply was not the kind of gap that would allow for dramatic changes and improvements between the initial and follow-up inspections of facilities.

Finally, some factors cannot be anticipated and cannot be controlled. When the Nevada ERP for dry cleaners was first proposed, the "Great Recession", and its very severe impact on the state of

Nevada, could not have been realized. Not only did the recession have a negative impact on the businesses, some of whom closed their doors during the course of the ERP, but it also had a negative impact on the local agencies whose support was so necessary to the project. As agencies struggled with declining revenues and the need for cutbacks and consolidations, there was a lack of stability in personnel involved in the project and a perception by some of the remaining staff that breaking down the "stovepipes" could translate to further consolidations and workforce reductions. Difficult times can sometimes lead to innovation, but they can also result in a "hunkering down" with the status quo.

## **5.0 PROGRAM CONCLUSIONS**

The ERP process definitely offers an approach for reaching an industry sector in a way that can improve environmental awareness and performance. In the case of the Nevada ERP for dry cleaners, the general consensus is that the project led to improved interactions with the regulated community – one that has resulted in improved industry awareness, compliance, and overall environmental performance – and the project also lead to improved interactions between the regulating agencies at the state, county, and city levels.

For the businesses, particularly when multiple agencies are involved in the inspection of individual business operations, the ERP approach to consolidate all pertinent multi-media regulatory and permitting requirements in one place can prove very helpful. This is particularly true for industry sectors predominated by small businesses where the owners and operators typically wear many hats – including the environmental, health and safety hat. The self-certification process, combined with outreach, training, and the offer of one-on-one technical assistance can lead to improved compliance and more thorough adoption of industry best management practices.

For the regulatory agencies, however, the process requires significant amounts of upfront resources. Whether that investment of resources in the short term provides the desired results in terms of reduced administrative burden and improved environmental performance over the long term to justify that investment remains as a question mark for most states that have implemented an ERP.

A multi-agency, multi-media ERP effort can definitely work to provide environmental improvement results – as it did in Nevada – but it will probably work most effectively when the commitment comes from an organization with direct authority over all the agencies involved; either by organizational delegation/reporting relationships or through contractual (i.e., funding) relationships. Because some of the local agencies involved in the Nevada ERP report directly to US EPA and not to Nevada DEP, the lack of ability to command participation in the ERP hampered the ability to get complete participation by all of the agencies whose participation was necessary. Such challenges are not insurmountable and they do not necessarily preclude positive results, but such challenges need to be recognized and addressed in the conceptualization and planning phases of an ERP.