Indiana Department of Environmental Management Final Report to the U.S. Environmental Protection Agency for the 2003-2004 State Innovation Grant Program

Indiana CLEAN Community Challenge

Summary and Results

In February 2005, the Indiana Department of Environmental Management (IDEM) received grant funding from U.S. EPA to develop and implement a voluntary program designed to encourage positive environmental actions from municipalities called the Indiana Comprehensive Local Environmental Action Network (CLEAN) Community Challenge.

The **goals** of the grant were to:

- 1. Create a voluntary recognition program for the local government sector;
- 2. Provide increased state consideration for local concerns through improved communication, planned compliance, and technical assistance efforts;
- 3. Foster local government pollution prevention success stories in Indiana;
- 4. Promote high quality environmental project implementation at the local level;
- 5. Offer valuable rewards in proportion to projects implemented;
- 6. Improve overall environmental performance and quality of life for Hoosier citizens;
- 7. Track environmental performance associated with EMS implementation;
- 8. Work towards cleaner water, improved waste management, reduced toxics; and
- 9. Encourage municipalities to develop cross-media EMS plans.

In order to achieve these goals, IDEM's Office of Pollution Prevention and Technical Assistance (OPPTA) devised a multi-agency program to reward municipalities for their voluntary environmental and public outreach achievements. The Indiana CLEAN Community Challenge encourages municipalities and units of local government to take steps to plan, develop, and implement an environmental management system (EMS) that includes input and support from the community and local business. Due to the community and business outreach requirements of the Indiana CLEAN Community Challenge, the implemented EMS is referred to as a Quality of Life Plan.

Background

OPPTA offers compliance and technical assistance to various business and industrial sectors. OPPTA has found that this type of assistance has led to improved compliance rates from entire sectors and promotes greater communication concerning compliance issues and improved rule making within IDEM.

Before the Indiana CLEAN Community Challenge, a compliance and technical assistance program specific to municipalities was not available. IDEM created the Indiana CLEAN Community Challenge to increase communication between state and local governments, provide incentives and rewards for effective implementation of pollution prevention techniques, and increase partnerships between local government, business, and citizen organizations all while

improving the quality of the environment. Additionally, the CLEAN program afforded OPPTA with the opportunity to provide needed regulatory and compliance assistance, establish one point of contact at IDEM, and encourage implementation of creative ways to address "hot topic" issues at a local level.

Project Milestones and Accomplishments

- 1. Form partnerships; develop initial program details: Initial development of CLEAN program (met with mayors to gauge interest, developed implementation plan, determined timeframes); promoted multi-agency involvement (met with other agencies to determine their involvement, presented information to various agency senior level staff, chaired multi-agency board meetings for grant program approval allowing additional benefits to CLEAN participants); researched recognition programs from other entities for additional ideas; hired an employee to manage the program; determined resources and materials needed for outreach; developed a verification program; trained staff on EMS programs; worked with Governor's Office to determine level of interest; established benefits to participating; researched and developed list of project ideas in various categories that municipalities could implement; developed application to program; developed a program logo
- 2. <u>Finalize participant benefits and application requirements:</u> Finalized program benefits and verification requirements; signed contract with the Indiana Clean Manufacturing Technology Institute (CMTI) at Purdue University to provide technical assistance with EMS audits
- 3. <u>Promote program; solicit pilot community applications:</u> Developed website; printed brochures and distributed to mayors and other interested parties; received and reviewed pilot CLEAN Community applications; issued press release and held event announcing CLEAN program and pilot communities as Town of Ogden Dunes, City of Lawrence, and City of Muncie
- 4. Designate and recognize 3 pilot communities; begin to create a quality of life plan for each pilot; provide an on-site assessment of each pilot; receive non-pilot community applications: Promoted the program and researched ideas municipalities could implement (success stories from other municipalities across the nation); reviewed and commented on pilot pre-applications; reviewed final applications and conducted verification site visits and compliance checks; designated the Town of Ogden Dunes and City of Lawrence as CLEAN communities, including press releases, an onsite recognition ceremony with the IDEM commissioner, plaque, and street sign
- 5. Designate and recognize first round of Indiana CLEAN Communities; determine measurable outcomes to EPA; adjust QAPP to reflect measurable outcomes; begin to determine baseline: Provided on-site compliance assistance to non-pilot communities interested in applying; received EPA approval for initial QAPP as well as revised QAPP: reviewed and commented on non-pilot pre-applications; reviewed final applications and conducted verification site visits and compliance checks; designated the cities of Crown Point, Indianapolis, La Porte, and Michigan City

- 6. Submit quarterly and annual reports to EPA: Submitted eleven quarterly reports to EPA
- 7. Continue implementation of CLEAN program: Developed annual performance report; responded to requests for assistance; provided on-site assistance to municipalities, offered EMS training programs to municipalities; accepted applications for municipalities joining the program; continued assisting pilot communities and monitoring environmental progress of participants; spoke at quarterly mayor meetings and municipality conferences to promote the program; modified the program as necessary when problems were encountered; reviewed annual reports submitted by participating municipalities and monitored environmental progress; confirmed continuation of program with agency administration

Project Summary

OPPTA staff was aware of the ISO 14001:2004 EMS standard, but thought this particular standard was too resource intensive for cash-strapped communities. OPPTA considered various components of EPA's Performance Track program and the ISO 14001:2004 EMS standard, and met with various communities throughout the state asking for feedback during program development to create the Indiana CLEAN Community Challenge program requirements.

During the development of the CLEAN program requirements, communities suggested developing "carrots" or financial benefits for participating. In response, OPPTA developed partnerships with other Indiana state agencies and environmental organizations providing financial and regulatory benefits to members (see Attachment 9).

Because OPPTA staff had limited experience with EMSs in the public sector, OPPTA hired the Clean Manufacturing Technology Institute (CMTI) at Purdue University, which is a local PEER Center, to assist with municipal EMS development and implementation. Additionally, OPPTA staff completed the ISO 14001 EMS Lead Auditor training and an additional two-day ISO 14001 EMS overview course, as well as the U.S. EPA Performance Track Site Visit training, to enhance the EMS assistance provided to municipalities in the CLEAN program.

OPPTA piloted the CLEAN program and Quality of Life Plan development with three Indiana communities of various location, size, geographic and environmental settings, plus other factors. OPPTA signed a Memorandum of Agreement (MOA) with each pilot stating the commitments from the community and IDEM for the purposes of CLEAN. The MOA provided assurance that the pilot communities were committed to working through initial challenges that arose with the implementation of a new program.

The following eight communities applied for piloting the CLEAN program: Town of Ogden Dunes and the cities of Elkhart, Greencastle, Indianapolis, La Porte, Lawrence, Madison, and Muncie. The Town of Ogden Dunes and cities of Lawrence and Muncie were selected to participate as pilot communities. The remaining communities expressed commitment to the program by participating as non-pilots. Additionally, the City of Richmond began participating

as a non-pilot during the second year of CLEAN implementation and the cities of Crown Point and Michigan City joined the list of non-pilot participants during the third year.

During the program's first year, communities focused on creating their stakeholder committees and writing their Quality of Life Plans (QLPs). Meanwhile, CLEAN program guidance materials were developed or changed as needed. By the end of the first year, two communities (Ogden Dunes and Indianapolis) had submitted draft QLPs to OPPTA for review and the City of Lawrence had their QLP almost completed. The City of Muncie had convened a stakeholder committee and held several meetings, but had difficulty completing tasks. The City of Madison established a stakeholder group and started identifying aspects and impacts. The City of La Porte hired a consultant who reported the city had completed part of the QLP, but did not submit any documentation to OPPTA for review. The cities of Elkhart and Greencastle continued to express interest in the program, but made no progress toward developing their QLPs.

At the start of the second year (the fifth quarter), two of the pilot communities, Ogden Dunes and Lawrence, submitted their final QLP drafts and their CLEAN program application. Both communities received their CLEAN community designation during the sixth quarter. Ogden Dunes continually provided verbal updates throughout the year indicating the town was making progress toward its QLP goals. Meanwhile, the City of Lawrence had several changes in personnel and had difficulty implementing their QLP. Muncie, the third pilot community, made considerable progress toward completing its QLP, but stopped participating in the program because of time constraints and a loss of mayoral commitment.

During the sixth and seventh quarters, Madison and Indianapolis submitted final drafts of their QLPs along with CLEAN applications. Upon final review, Commissioner Thomas Easterly determined that Indianapolis needed to enhance its QLP activities and Madison needed to address a non-compliance issue. The Cities of Richmond and La Porte continued working on their QLP. By the end of the second year, the cities of Greencastle, Elkhart, and Vincennes were overwhelmed by other commitments and did not finish development of their QLPs.

At the beginning of the third year (ninth quarter), OPPTA provided an introductory presentation at the January 4, 2007, monthly meeting of the Northern Indiana Regional Planning Commission (NIRPC) to solicit community participation. The cities of Valparaiso, Chesterton, and Crown Point, and the Towns of Portage and Beverly Shores expressed an interest in the CLEAN program. These and other potential participants were invited to attend a more detailed half-day presentation on February 1, 2007. Attendees at this meeting included Beverly Shores, Crown Point, Michigan City, and La Porte. This program provided a discussion of CLEAN, presentation of EMSs, and a presentation by Susan Mihalo, the Town of Ogden Dunes representative, where she discussed the benefits and challenges their community experienced in the CLEAN program.

Following these meetings in northern Indiana, workshops and smaller meetings were used to guide multiple communities through development of their QLP. The first workshop took place on March 30, 2007. Communities attending this workshop included Michigan City, Hobart, Markstown, Gary, and La Porte. Workshop participants were provided with a complete

package of CLEAN program materials including program guidelines, PowerPoint presentations, benefits list, sample QLPs, worksheets, implementation plans, and sample operating procedures and tracking forms. By April 2007, site visits were completed for Michigan City, Crown Point, and Hobart.

During the same quarter, Richmond and La Porte submitted draft QLPs to OPPTA for review. Both communities were provided with suggestions for improving their QLPs. The Town of Ogden Dunes had made measurable progress and presented the data at the National Environmental Partnership Summit, May 2007, in New Orleans, Louisiana. The City of Lawrence continued to have difficulty with the program. The cities of Crown Point, Hobart, and Michigan City began developing their QLPs as part of a northern Indiana CLEAN initiative. OPPTA partnered with EPA Region 5 staff in order for EPA staff to gain a better understanding of the QLP development process in exchange for EPA staff assisting northern Indiana communities with their QLP development.

The second workshop was provided on April 24, 2007. OPPTA and CMTI discussed typical regulatory issues applicable to municipal operations and attendees identified and prioritized aspects and impacts for a sample automotive maintenance shop. Stakeholders were then provided with a copy of the Municipal Impacts Environmental Expert Database and a condensed version of aspects and impacts for the departments selected in their QLP. Stakeholders were asked to prioritize their individualized lists and develop goals.

During the tenth quarter, Richmond submitted their final QLP application and Michigan City submitted their draft QLP. Both communities were provided with comments to improve their QLP. OPPTA also determined this quarter that Richmond had to address a non-compliance issue before being awarded with the CLEAN designation. Crown Point continued to work on their QLP, but Hobart put their participation on hold until after the November elections.

During the eleventh quarter, Indianapolis received their CLEAN designation. OPPTA and CMTI assisted Ogden Dunes and Lawrence with completing their annual internal audit and provided suggestions for using this data to complete their annual performance report. Ogden Dunes provided data in their annual performance report showing measurable improvements and significant benefits from participating in the CLEAN program. The City of Lawrence, in spite of repeated hands-on assistance, failed to complete the tasks necessary to implement their QLP. Lawrence has yet to submit their annual performance report.

During the twelfth quarter, Crown Point, La Porte, and Michigan City received their CLEAN designation. During this same quarter it was determined that Madison's compliance history disqualified them for CLEAN designation program; however, Richmond would still qualify once the city addressed the non-compliance issue.

The cities of Chesterton, Gary, Valparaiso, Vincennes, and towns of Beverly Shores, Florence, and Portage attended CLEAN presentations and expressed an interest in the CLEAN program, but decided not to participate for various reasons.

Lessons Learned from Project Implementation

Program Revisions

The CLEAN program was initially developed with two levels of recognition: Level 1: Committed CLEAN Community and Level 2: Outstanding CLEAN Community. The Quality of Life Plan requirements were the same with the exception that Level 2 recognition required yearly monitoring and self-auditing; therefore, the financial incentives were only provided to communities participating in Level 2. Because none of the three pilot communities were interested in pursuing Level 1 recognition and desired the financial incentives afforded to Level 2 members, OPPTA revised the CLEAN program to one level so that all participating communities pursue the same designation, requirements, and benefits. OPPTA made other slight adjustments to the CLEAN program over time as suggested by the pilot communities.

OPPTA refined the benefits afforded to participating communities by affording financial benefits to only those municipal departments and operations included in the Quality of Life Plan.

OPPTA staff began running compliance checks on communities at the time the community expressed interest in the CLEAN program instead of waiting for the community to develop their QLP and submit their application. This particular program revision has proven to be very beneficial for communities as it identified potential problems before the community selected QLP goals. Plus, OPPTA is more efficiently able to use resources and staff time.

OPPTA increased the "carrots" for program participation by adding regulatory incentives to the list of benefits (as provided by the development of the Indiana Environmental Stewardship Program).

OPPTA learned it was overly complicated to include all municipal departments in the Quality of Life Plan so it is now recommended that communities start with a small, manageable number of operations and expand their Quality of Life Plan over time.

Technical Assistance Provided to Participants

During the first year of program implementation, it became apparent that participants had difficulty understanding the requirements of the program, the overall end product, and several components of the QLP, particularly components related to aspects and impacts. To address the confusion, OPPTA and CMTI expanded the introduction and explanation of CLEAN to include a discussion of the ISO 14001:2004 EMS standard and increased the assistance provided to participating communities. Additionally, OPPTA staff developed sample QLP materials. The QLP development and implementation methodology used by each participating community as well as the guidance materials developed for CLEAN are contained as attachments to this report.

OPPTA and CMTI conducted confidential site visits to assist communities with identifying municipal operations, aspects and impacts, and an overall compliance assessment, which became very time intensive because the level of needed assistance was more than what was anticipated.

Initially, stakeholders were requested to identify and prioritize their aspects and impacts. As communities went through this process, OPPTA and CMTI realized that participants had difficulty with the concept of aspects and impacts, working with comprehensive lists, and agreeing on evaluation criteria. OPPTA and CMTI modified this process and used the information collected during the site visit and meetings to provide stakeholders with their aspects and impacts. Stakeholders then felt more comfortable with using pre-selected criteria to prioritize the aspects and impacts provided to them. The prioritization activity was intended to illustrate overlap between departments and help stakeholders select activities to address high priority issues. The merged aspect list assisted each department in developing a list of potential projects based on their own criteria. The stakeholders discussed potential projects and criteria selected by each department and used this to develop QLP goals, which appears to be a more effective method for developing QLP goals.

Additionally, OPPTA developed a Municipal Impacts Environmental Expert Database tool with financial assistance from the U.S. EPA Pollution Prevention Demonstration Grant Program. This database is available at no cost to communities nationwide and can be requested at http://www.in.gov/idem/programs/oppta/clean/municipal.html. Database users can identify potential environmental impacts from everyday municipal activities, activities with legal implications, create an environmental aspect matrix, and identify best management practices as well as the benefit and approximate cost to implement such best management or pollution prevention practices.

Throughout the pilot project period, participants appeared to understand the value of identifying objectives and targets, action steps, and methods for monitoring and measuring progress. Most communities completed these requirements using only the sample QLP as a guide. Communities did need some assistance in identifying measurable parameters for projects and with developing procedures and forms to track QLP progress.

Although detailed compliance information did not have to be included in the QLP, communities were required to identify and comply with applicable environmental regulations. Every participating community needed assistance with this requirement. Initially, compliance assistance was provided only during the site visit. However, because several communities requested additional information and were addressing pending enforcement issues, regulatory training and educational materials were added to the introductory presentation to CLEAN.

During the first two years, stakeholders repeatedly failed to convene meetings, complete tasks, and submit materials. To address this, the three pilot communities were provided with a calendar of deadlines for different tasks and monthly conference calls were conducted in order to clarify next steps, offer guidance, and provide a forum for communities to share information and updates with each other. This was useful in keeping communities moving forward. Two of the three pilots met most of the deadlines and received their designation by the second quarter of the second year. However, the third pilot rarely met deadlines, lost the mayor's support and ultimately dropped out of the program. Other communities experienced delays in progress because of internal circumstances such as personnel changes, pending enforcement actions, temporary leave by the program representative, or time constraints caused by an election.

Although these circumstances cannot be controlled, they do illustrate why it is so important to develop the QLP as quickly as possible before circumstances change. By the third year, improvements to the CLEAN program and the development of support materials appear to have decreased the time required to develop a QLP.

During the third year of the pilot project period, OPPTA began conducting program marketing, outreach, and presentations in a workshop-type forum with representatives from multiple communities in attendance. The workshop consisted of a detailed CLEAN program overview along with a description of how each component of the QLP relates to the ISO 14001 plan-do-check-act model. The program materials and approximate time frame for completing each task was also discussed. Communities interested in participating were then asked to draft a mission statement, select departments to include in the QLP, and schedule a site visit with OPPTA. In the meantime, OPPTA conducted a compliance check to ensure the community was qualified to participate.

Although the effectiveness of each QLP can not yet be assessed, it appears the workshop forum provided participants with a better understanding program requirements, overall end product, and the amount of time needed for CLEAN program participation. With a complete package of sample materials, more direct hands-on assistance, and more flexibility in selecting goals, participants moved through the QLP development process much more quickly than those participants during the first two years of the project.

Program Marketing

It is difficult to get new communities interested in the CLEAN program due to the program's voluntary nature and time commitment. Progress by pilot and non-pilot communities was sporadic because the voluntary QLP is not always a priority. Moreover, OPPTA learned that QLP progress will be slow without top management support in a participating community.

OPPTA staff found there were several drivers for municipalities to implement an EMS, which are used to market the CLEAN program: regulatory obligations; public concern for the environment; public image; growth management; efficient use of public funds; and operational realities and turnover.

OPPTA received feedback from participating communities indicating that implementing the QLP established commitment from all levels and functions to achieve community goals; assigned responsibility and accountability for achieving goals; assisted with competence, awareness, and management of potential environmental aspects; identified legal requirements and best management techniques; formalized communication between departments, committees, and responsibility levels; allowed municipalities to focus on a few challenges at a time; enabled municipalities to identify and address the "low-hanging fruit" environmental improvements; and provided a better method to measure, monitor, and evaluate goals.

Lastly, OPPTA learned that municipalities considered the confidential onsite technical assistance and the single point of contact at IDEM invaluable for answering environmental questions.

Recommendations for Future Projects like CLEAN

Upon completion of the CLEAN pilot project, OPPTA has the following recommendations for other states or regions interested in developing a voluntary municipal recognition program like the Indiana CLEAN Community Challenge:

- 1. Meet with and receive feedback and comments from prospective program participants. Collecting this information is critical in developing a program that suits the needs of the area and accounts for variations across regions.
- 2. It is imperative to have top-management support in each community to order to make QLP development and implementation a priority.
- 3. Keep the program simple by not complicating the program with multiple recognition levels or varying levels of participation.
- 4. Focus program advertisement and marketing on quality of life issues, not just environmental or compliance issues, otherwise communities may not be interested.
- 5. Allow the program to reflect individual community goals, not just the state or agency goals.
- 6. Provide meaningful benefits to encourage communities to participate and reward them for their efforts.
- 7. Partner with other program areas and agencies to provide benefits, which also establish open lines of communication with other program areas that work with local governments.
- 8. Provide training opportunities for agency program managers by attending ISO 14001 EMS training, U.S. EPA Performance Track Site Visit training, or other training opportunities that will familiarize program managers with EMS implementation.

Project Measurement

It is difficult to evaluate the effectiveness of each QLP at this time because many have only recently received their CLEAN designation and have not yet fully implemented their QLP. However, three communities can be discussed as two were designated in 2006 and the third began implementing QLP goals before receiving their CLEAN designation. The three communities are the Town of Ogden Dunes, City of Lawrence, and City of La Porte, respectively.

Ogden Dunes' QLP resulted not only in measurable environmental improvement as described in their annual performance report (see Attachment 15), but provided ancillary benefits like improved interdepartmental communication as well. As of September 2007, Ogden Dunes increased their recycling rate to 24%, recycled 884 pounds of batteries, and implemented a standard operating procedure for recycling; reduced invasive species in Pollywog Pond by approximately 40%; developed a leaf composting site and composted over 1,500 cubic yards of leaves; and is developing an environmentally preferred purchasing policy. Lawrence's QLP is yet to be implemented due to administration turnover so there are no measurable results at this time. Yet Lawrence did evaluate their operations and compliance requirements, and implemented several activities for improving their environmental performance. As such, the QLP provided some benefits, but an evaluation of its effectiveness would be subjective.

La Porte's completed QLP was not submitted for approval until February 2007. Nonetheless, La Porte had identified their objectives, targets, action steps, and parameters for

measuring progress by the end of the first year. La Porte began implementing their QLP as soon as the goals were approved by the mayor. La Porte thought measurable progress toward their goals had to be shown before the city could receive CLEAN designation. As a result, it can be assumed that the QLP components addressing project selection, implementation, and monitoring were effective for La Porte.

To date, there are seven members of the Indiana CLEAN Community Challenge and OPPTA is providing guidance and assistance to several more communities. CLEAN members are required to submit an Annual Performance Report summarizing progress during each year of membership, with the first report due fourteen months after designation. Ogden Dunes and Lawrence were designated during summer of 2006 and were required to submit their first annual performance report in fall of 2006. The remaining five member communities are not required to submit a report until 2009 because of their recent CLEAN designation dates. Thus OPPTA has received Ogden Dunes' annual performance report. Lawrence's annual performance report is yet to be submitted due to administration turnover; however, OPPTA is working to obtain this report. Ogden Dunes' annual performance report is available as Attachment 15.

Grant Financial Status

The time and effort coding for the final quarter of the grant is yet to be closed by IDEM's accounting office. The remaining grant balance and in-kind match requirement will be reflected in the next federal financial report.

Outreach Materials

The following list briefly describes the outreach materials developed for marketing and advertising the Indiana CLEAN Community Challenge:

- Brochure explaining the CLEAN program requirements, benefits, and available technical assistance;
- Promotional video with interviews of participating mayors, municipal officials, and a municipal association;
- Window cling with the CLEAN logo for use by participating communities;
- Personalized etched awards made of recycled glass for participating communities;
- Tote bags with the CLEAN logo for stakeholder members;
- CLEAN conference display panel; and
- Golf balls with the CLEAN logo to distribute to city and town officials at conferences.

Attachments

- Attachment 1: Indiana CLEAN Community Challenge: Quality of Life Plan Designation
- Attachment 2: City of Crown Point Quality of Life Plan
- Attachment 3: City of Indianapolis Quality of Life Plan
- Attachment 4: City of La Porte Quality of Life Plan
- Attachment 5: City of Lawrence Quality of Life Plan
- Attachment 6: City of Michigan City Quality of Life Plan
- Attachment 7: Town of Ogden Dunes Quality of Life Plan
- Attachment 8: Summary of Quality of Life Plan Objectives

- Attachment 9: Indiana CLEAN Community Challenge: Benefits Summary
- Attachment 10: Indiana CLEAN Community Challenge Application
- Attachment 11: Indiana CLEAN Community Challenge Annual Performance Report
- Attachment 12: City of Cleanville Sample Quality of Life Plan
- Attachment 13: How to Develop a Mission Statement Worksheet
- Attachment 14: Identifying Aspects and Impacts Worksheet
- Attachment 15: Town of Ogden Dunes Annual Performance Report
- Attachment 16: List of Potential Environmental Liabilities
- Attachment 17: Corrective Action Tracking Form
- Attachment 18: Definitions
- Attachment 19: Prioritizing Aspects Example
- Attachment 20: Internal Audit Checklist
- Attachment 21: Municipal Departments, Operations, and Activities list
- Attachment 22: Quality of Life Plan Checklist
- Attachment 23: Aspect Rating Criteria Suggestions
- Attachment 24: Employee Training PowerPoint for Quality of Life Plan Initiatives
- Attachment 25: Sample Complaint Inquiry Response Form
- Attachment 26: Sample Complaint Inquiry Response Log
- Attachment 27: Sample Document Development Request Form
- Attachment 28: Sample Emergency Response Chain