20 Points of Light

The 20 Points of Light Project was initiated at the Texas Natural Resource Conservation Commission (TNRCC, or the Commission) in November 1995, in response to frequent requests for guidance on a number of problematic regulatory requirements for Class I injection wells. At the first meeting of the project participants, it was agreed that issues should be resolved through a technical peer review process, using a standard format for concise documentation of considerations and recommendations.

The peer review process was chosen with the belief that this process increased the probability of achieving the objective of consistent rule interpretation and practice among well operators, inspectors, and staff involved in permitting. In particular, it was considered that peer reviews including persons of different perspectives (e.g., operator, inspector, and permit writer) would hopefully achieve synergies in understanding of issues and formulation of recommendations, which might not be realized if either of the three cited groups independently attempted to resolve any such issues.

The project, which is open to participation by all interested persons, developed as a cooperative effort within the Underground Injection Control (UIC) Program, involving representatives from the Commission's Field Operations and Waste Permits Divisions, and the Texas Chemical Council's UIC Subcommittee. Each of the issues or "points" has been suggested for peer review by one or more UIC Program participants, and has been accepted for review by the "20 Points" Committee.

The project's technical peer review process and resulting recommendations are directly consistent with the following of the TNRCC Commissioner's Guiding Principles:

- To promote and foster voluntary compliance with environmental laws.
- To ensure that regulations promote flexibility in achieving environmental goals.
- To ensure that regulations and decisions are rational and based on common sense, good science, and current risk factors.
- To ensure that regulations are applied clearly and consistently.

Over the past several years, the project's technical peer reviews have been presented annually for discussion at conferences sponsored by the Ground Water Protection Council (GWPC) and at the TNRCC Environmental Trade Fairs. Attendance at these sessions has averaged approximately 60 persons including Class I well operators, consultants, attorneys, and state and federal regulators. Comments received at these events have been very supportive of the project, the methods employed, and the recommendations which have been developed. In response to requests from the regulated community that the project's approved peer reviews be posted on the agency's internet web page, UIC Program staff are hereby complying by posting the peer review documents for Phases I and II of the project.
Phase I of the project includes the following peer review issues approved in July 1997 by the deputy directors of the participating offices of the Commission for use by the program: Issues 1, 2, 5, 6, 7, 8, 9, 10, 11, 12, 14, 16, 17, and 20.

Phase II of the project includes the following peer review issues approved in April 2000 by the deputy directors of the participating offices of the Commission for use by the program: Issues 3&4 (combined), 13, 15, 18, and 21. Featured in the Phase II group of peer reviews are standards for continuous monitoring and recording applicable to the types of digital monitoring and control systems that are becoming more prevalent in operation of large plants for chemical manufacturing (see combined Issues 3 & 4). With regard to continuous monitoring and recording, the work group recognized the diversity of approaches to regulatory compliance from one well operation to another, and invested extra time and effort to understand the different systems that exist, and the specific concerns associated with each system.

Issue 19 is notably absent from the list of completed peer reviews, because of the opinion developed by the Committee that the issue was primarily a matter of company internal communication, rather than one driven by a particular rule or permit requirement.

Four additional issues for peer review (i.e., Issues 22, 23, 24, and 25) have been added to the project through the suggestions of persons attending GWPC and TNRCC conferences. These four most recent issues have been designated as Phase III of the project. Recommendations for each of the Phase III issues will soon be available for management review. Although the workgroup is expected to become inactive after peer reviews for all identified issues have been completed, it is contemplated that the project may be reactivated whenever new issues arise which are appropriate for use of technical peer review.

The following files contain one Point of Light Peer Review, which is essentially an agreement between industry, the public, and the TNRCC on how certain procedures or rules are carried out, interpreted, etc.

**Issue No 1** - Regional Underground Injection Control (UIC) inspectors do not have written guidance to determine if gauges and recorders are in good working order which is questioned on the TNRCCs UIC Inspection Checklist.

**Issue No 2** - Reporting Discrepancy: For a recording system available to an operator, for example a strip chart, a recordkeeping and reporting error is likely to occur. The UIC workgroup proposes no more than ten (10) percent allowable discrepancy between self-reported monthly values and actual recorded data.

**Issue No 3&4** - Regional Underground Injection Control (UIC) Inspectors, permit writers, and operators do not have written guidance on what "continuous" means in the context of monitoring and recording specific parameters. In addition, it is not clear that electronic monitoring and recording systems will satisfy "continuous" monitoring and recording requirements.

**Issue No 5** - Underground Injection Control (UIC) well operators have not been consistent in their emergency reporting requirements as found in 30 TAC §331.65.b.5. The section requires 24 hour notification of the UIC Unit in Austin of any significant
change in monitoring parameters, or of any other observation, which could reasonably be attributed to a leak or other failure of the well equipment or injection zone integrity. It is perceived that several UIC operators may be unnecessarily conducting 24 hour notification under this provision as there is some confusion as to what is implied by "or other failure of well equipment".

**Issue No 6** - The instructions on the UIC Class I Injection Reporting Forms for "Annulus Pressure Differential" are not clear as to whether operators should be reporting the absolute lowest value that occurred during the month or the lowest value that resulted in a permit exceedance (violation). The remaining parameters that are reported have instantaneous limits so all exceedance must be reported.

**Issue No 7** - Monitoring of Class I Injection Well when Temporarily Abandoned or when operator has ceased injection operations temporarily.

**Issue No 8** - Discontinuing state enforcement of EPA's "No-Migration" Petition Conditions: Elimination of unnecessary and duplicative regulatory burdens on Class I injection well operators and the State UIC Program relating to EPA's responsibility for enforcement of "No-Migration" Petition Conditions, also known as "Land Disposal Restriction (LDR) exemption conditions", through State Program discontinuance of compliance monitoring/enforcement of exemption conditions.

**Issue No 9** - Division of responsibilities between TNRCC staff and well operators concerning Class I UIC financial assurance for plugging and abandonment of a well.

**Issue No 10** - Reconciling differences in state and federal corrosion monitoring requirements for Class I injection wells.

**Issue No 11** - Waste Analysis Plans: Sampling and analysis of injected waste fluids for Class I injection wells.

**Issue No 12** - Physical location requirements for "wellhead" pressure gauges.

**Issue No 13** - Primary monitoring system problems: Without a quality assurance/quality control (QA/QC) program, the reliability of a primary monitoring system, and hence the self-reported monitoring data, can be questioned. How to address this instrumentation issue pursuant to an UIC inspection?

**Issue No 14** - Timing for shutting in a disposal well in response to an alarm condition.

**Issue No 15** - Annulus monitoring requirements during start-up, shut-down, changes in operation, and reporting momentary anomalies ("spikes") in annulus monitoring data.

**Issue No 16** - Required notification and approval for workovers.

**Issue No 17** - Flexibility of scheduling of annual mechanical integrity testing (MIT) and pressure fall-off testing (PFOT) of Class I injection wells.
Issue No 18 - Guidance for inspectors concerning standardized records requests and review procedures.

Issue No 19 - Committee declined to complete a peer review on this issue based on the opinion that the issue was primarily a matter of internal communication, rather than one driven by a particular rule or permit requirement.

Issue No 20 - Changes in permit conditions need to be reflected in quarterly/monthly injection reporting forms.

Issue No 21 - 30 TAC §305.72 Underground Injection Control (UIC) Permit Modifications at the Request of the Permittee. 30 TAC §305.72(b)(4) allows and specifies conditions for minor modification of Class I UIC permits that, "Change quantities or types of fluids injected which are within the capacity of the facility as permitted and in the judgment of the executive director, would not interfere with the operation of the facility or its ability to meet conditions described in the permit and would not change its classification." This peer review provides guidance on interpretation of the term "types" of fluids injected.