

Regulatory Survey Regarding Polyethylene Diffusion Bag Sampling Preliminary Results

The ITRC Diffusion Sampler Workgroup conducted a survey of State regulators in May, 2003. The primary purpose of the survey was to identify and rules or regulations that would impede the implementation of PDB sampling. None were identified. The survey also sought the views of regulator's on specific applications for PDBs and their familiarity with the technology.

The survey was Internet-based, so that responses were entered and recorded online. Contact with regulators was initiated by the ITRC State Points of Contact. Multiple responses were allowed within any State, without regard to specific agencies. In total 54 responses were received from 23 different States.

A complete analysis of the survey results will be published and be made available on the DSIC website. The focus of this discussion is on the potential impact of State and Federal rules and regulations on the use of PDBs, as well as the existing regulatory climate and attitudes that affect applications of this new technology.

One question on the survey asked respondents to identify any State rules or regulations that could hinder the use of PDBs for groundwater monitoring. Three responses suggested potential problems, however further investigation revealed that the situations cited did not represent a roadblock. One comment was in reality a technical comment related to appropriate use, and a second comment indicated a variance would be required because the methodology is not currently in the State's sampling manual. Notably, this particular State will publish a new manual this year that includes PDB sampling. The third comment concerned sites where monitoring for a broader list of contaminants that were not all amenable to PDB sampling. Again, this is more of a technical issue than a regulatory problem. In summary, then, the survey did not identify any barriers to the use of PDBs for groundwater sampling based in State rules and regulations. A similar question concerning Federal rules and regulations likewise did not identify any hindrances.

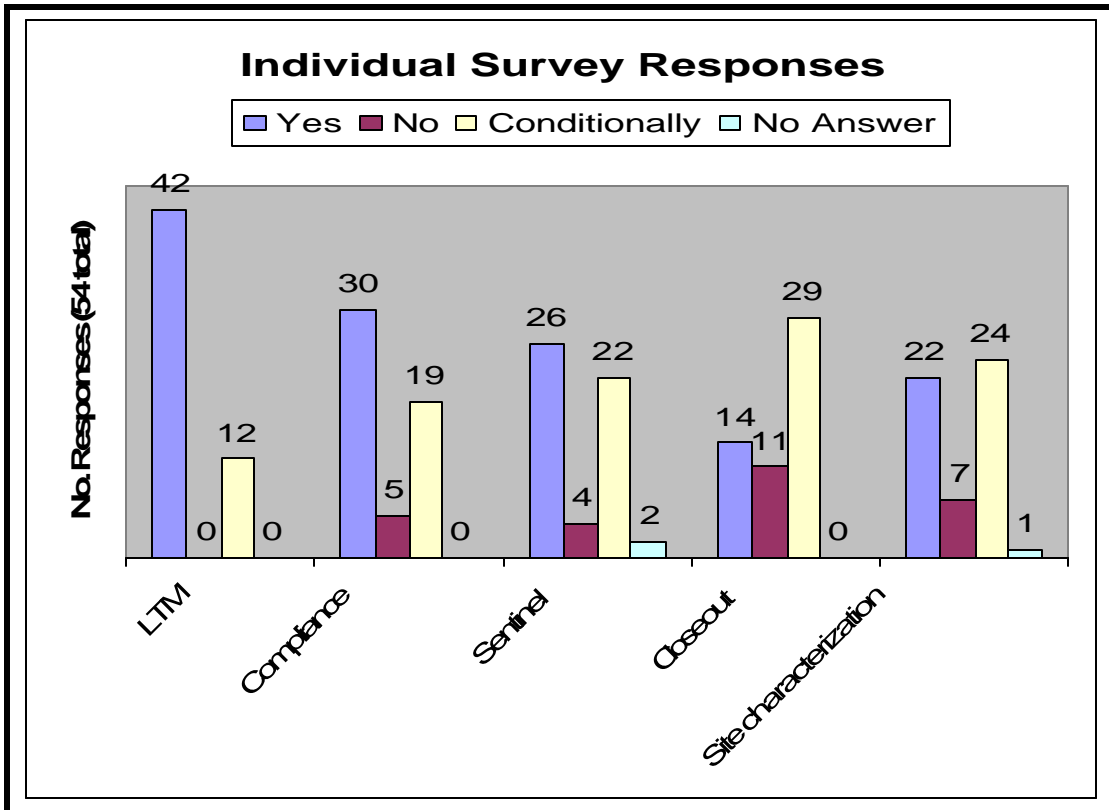
Regulators from nine of the 23 states surveyed stated they had guidance on PDB technology. However, in nearly all instances, this guidance was not actually a State-specific document, but an external publication such as the User's Guide (Vroblesky, 2001). At this time only a single State (New Jersey) has drafted specific guidance related to PDB sampling. The New Jersey guidance will be included in a revised version of the State's Field Sampling Procedures Manual, to be published in 2003.

PDB sampling is being implemented across the country. All but two of the 23 states reporting had sites that were currently using the technology.

One series of questions in the survey sought to identify what regulators thought to be acceptable uses for PDB sampling. Respondents were asked to "identify in which of the scenarios below you feel PDBs could be implemented, assuming all contaminants of

concern would be adequately monitored with PDBs.” The specific scenarios presented were for long-term monitoring, compliance monitoring, sentinel well plume detection, site closeout, and site characterization.

Figure 4-1. Individual regulator responses regarding the use of PDBs for various purposes. There were 54 total responses from 23 different States.



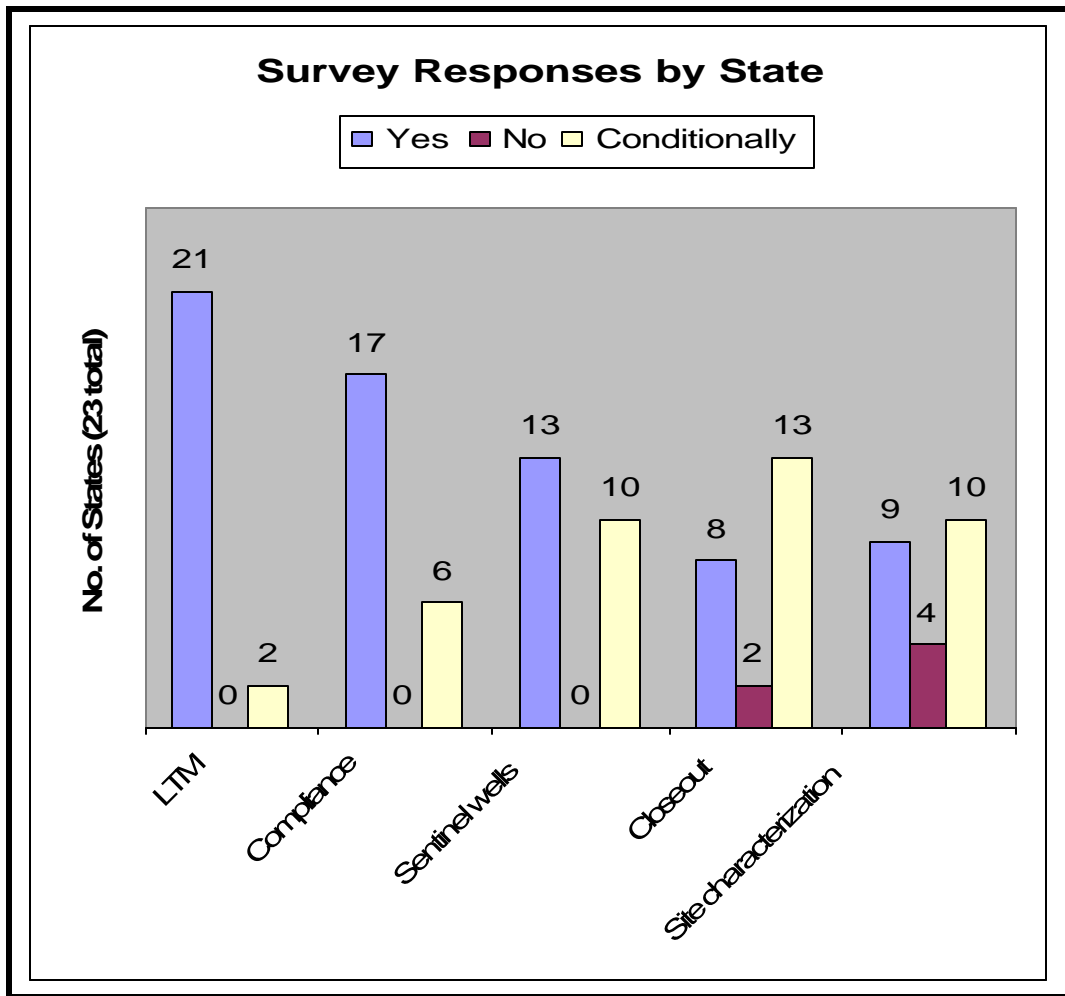
Use of PDB sampling for LTM had widespread support among the regulators. There were no objections, although some specified it was conditional on site specific characteristics. There were few objections to using the PDB technology for either compliance monitoring or sentinel well plume detection. Again some regulators cautioned site characteristics had to be considered.

The use of PDB sampling for site closeout was more controversial. Twenty-six percent of the respondents said they would support this use, and an additional 54 percent said they would support it with conditions. Twenty percent of the regulators stated flatly they would not use PDBs for site closeout. Of the five PDBs uses queried this one drew the most negative response.

The use of PDBs for site characterization was supported by 41 percent of the regulators, as well as an additional 44 percent who would do so conditionally. Thirteen percent would not favor the use of PDBs for site characterization.

Analysis of these data by State is complicated by the fact that ten States had multiple responses, sometimes from separate agencies. It is not surprising that there was some disagreement within a single State. Figure 4-2 is an attempt to summarize the results by State. In order to achieve this, the most liberal use of PDB technology has been reflected. For example, if one regulator in the State would permit the use of PDBs for site closeout, then that opinion is the one entered, albeit it others from that State may have rejected that use. A more complete compilation of the results may be found in Appendix D.

Figure 4-2. PDB survey results from 23 States indicating the acceptability to regulators of specific uses of this sampling technology. Note that the responses do not reflect an official State policy, but only the proclivity of individual regulators.



This survey of State regulators has identified a widespread support of the use of PDB sampling technology, particularly for LTM. Acceptance has been gained as more professionals become aware of the advantages of the technology. At the same time,

awareness of its limitations justifiably results in “conditional” approval by regulators. The application of PDBs should always be governed by site characteristics and DQOs.

Survey responses by state

States (23) Responses (54)

AL	1
AZ	1
CA	11
CO	2
FL	2
IN	1
KS	1
KY	2
MA	1
ME	1
MO	1
NE	1
NJ	13
NM	1
NV	1
NY	2
OR	1
PA	2
RI	2
SC	2
TN	3
TX	1
VT	1