



Public Safety and Sour Gas Quarterly Progress Report

July – September 2002

ALBERTA ENERGY AND UTILITIES BOARD
Public Safety and Sour Gas Quarterly Progress Report

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INTRODUCTION

This is the second quarterly progress report for the 2002/03 business year on the Alberta Energy and Utilities Board's (EUB's) Public Safety and Sour Gas (PS&SG) initiative. The report covers work under way from July through September 2002. Projects are based on the 87 recommendations made by the Provincial Advisory Committee on Public Safety and Sour Gas (Advisory Committee) in December 2000.¹ As of the end of September 2002 work has been completed on 14 recommendations, while work on 45 recommendations is ongoing.

The EUB is committed to improving how the public is informed about sour gas related issues. To assist with achieving this goal, a new EUB PS&SG project Web site is available at <<http://www.eub.ab.ca/bbs/public/sourgas/home.html>>. The site provides general information on sour gas, progress updates on current PS&SG recommendation projects, links to publications related to PS&SG projects, and a link to the Advisory Committee's Web site <www.publicsafetyandsourgas.org>. In order to help the EUB expand the PS&SG Web site and offer information that our stakeholders find valuable, the Public Safety Implementation Team welcomes your comments by telephone (403-297-3726) or by e-mail <eub.publicsafety@gov.ab.ca>.

Advisory Committee Evaluation of the EUB's Implementation Progress

In July 2002 the Advisory Committee published an evaluation of the EUB's implementation progress of the PS&SG recommendations.² Overall, the committee was pleased with the progress in implementing the recommendations. It believes

...that the EUB is "on target" with the 3-year implementation plan, and that the significant dedication of staff and financial resources to the project demonstrates the high level of commitment by the EUB's Chairman and Board Members. Advisory Committee members are pleased with the degree of enthusiasm and ingenuity put forth by many staff members involved with the implementation.

Although generally satisfied with the implementation progress, the Advisory Committee had a number of comments and concerns regarding specific areas. This report and subsequent progress reports will address those issues.

Some of the comments made by the Advisory Committee are still being discussed within the EUB and are not reported in this quarterly progress report. However, the EUB has taken note of these comments and in the coming months will determine how they should be addressed. For example, the EUB acknowledges the Advisory Committee's comment with regard to reporting progress on those recommendations that relate to Aboriginal communities. The EUB is continuing to work with stakeholders to determine the best way of communicating progress to all parties. In the meantime, the EUB will continue to send hard copies of progress reports to all identified Aboriginal stakeholders, as has been done since the beginning of the PS&SG project.

¹ PS&SG Findings and Recommendations Final Report, PS&SG Advisory Committee, December 2000. Available on the Internet at <<http://publicsafetyandsourgas.org>>.

² Advisory Committee on Public Safety and Sour Gas Evaluation of the EUB's Implementation Progress, PS&SG Advisory Committee, July 2002. Available on the Internet at <<http://publicsafetyandsourgas.org>>.

This report is structured to clearly identify quarterly updates on each current recommendation project, followed by Advisory Committee comments (where applicable) and a direct response to these comments from the project team.

The following is a brief summary of the measures taken to address the Advisory Committee's comments and concerns.

Health Effects and Sour Gas Research

- Alberta Health and Wellness's (AHW's) current approach to review hydrogen sulphide (H₂S) health effects will provide the necessary information for use in the emergency planning zone (EPZ) and risk assessment work. The review of the literature is complete and provides the health effects associated with a concentration of H₂S. The exposure duration inclusion of concentration and time elements is required for input into the dispersion modelling work and is ongoing. The H₂S work should be completed by year-end 2002.
- The schedule for completing the sulphur dioxide (SO₂) review has been extended to the fall of 2003 because of the volume of information that requires review.
- Development of the portable H₂S monitor will continue. It is not practical to develop other target compound instruments until this current work is completed.

Sour Gas Development Planning and Approval

- The Advisory Committee was concerned about the slow rate of progress on investigating improvements to surface/subsurface planning. In response, a senior government steering committee has been established to guide this work.
- The Advisory Committee commented that although completion of work on the standardized dispersion and risk assessment modelling is dependent on completion of certain other recommendations, much of the work could go forward in the meantime. In response, the EUB confirms that work is continuing so that the final products will be available as soon as practical.
- The Advisory Committee re-emphasized that the intent of creating a coordinated policy and application review is to provide a meaningful opportunity for involvement of other government departments and agencies in the development of EUB policy. In response, the EUB confirms that to date the focus of protocol development with regional health authorities (RHAs) and AHW has been on policy matters.

Sour Gas Operations

- The EUB will publish a new interim directive that clearly outlines the reclassification of requirements for conversion of a pipeline from sweet to sour service.

Emergency Preparedness

- The Advisory Committee emphasized the need to address all of the identified outstanding emergency response plan (ERP) issues. In response, the project team confirms that all 15 outstanding ERP issues will be assessed during the comprehensive review of the emergency preparedness guide over the next 18 to 24 months.

Information, Communication, and Consultation

- The Advisory Committee is concerned that the proposed new facility application checklist could be misused. In response, the checklist has been separated from the landowner questions. The Advisory Committee also commented that the landowner questions should be phased in because they deal with more than sour gas development. The EUB is currently discussing this view internally.
- The Advisory Committee endorsed determining “net financial benefits” from sour gas development, rather than “local benefits”, and further requested that the cost of setbacks be included under the project. The team had concerns about how setbacks could be accommodated within the methodology adopted for the study and has approached the Advisory Committee to determine how to best deal with the setback impact issues.
- The Advisory Committee has reiterated the need for a brief brochure as part of the EUB’s public consultation materials. The EUB will add this to the suite of products already completed.

Status of Recommendations—Summary Tables

The following tables summarize those recommendations that are complete and those that are ongoing as of September 30, 2002.

Summary of Recommendations Completed as of September 2002

Recommendation Category	Number	Description
Sour Gas Development Planning and Approval	6	Plant proliferation
	35	Prelicence review of critical well licence applications
	36	Licence application training/certification information requirement
Sour Gas Operations	25	Increase sour gas inspections
	26	Increase inspections of new and noncompliant operators
	27	Implement 100% inspection rate for critical wells near people
	28	Response to sour gas complaints
	68	Enhance EUB capability to monitor for complaint response/compliance
	85	Complaint/incident response program for Aboriginal communities
Emergency Preparedness	54, 60, and 61	Interim policy on ERP review and reduced EPZs
Information, Communication, and Consultation	29	Field staff in industry-landowner discussions
	37	EUB involvement in mediation of application issues
		Total Complete = 14

Summary of Recommendations Under Way as of September 2002

Recommendation Category	Number	Description
Health Effects and Sour Gas	9, 59	Health effects information on H ₂ S and SO ₂
	67	Develop personal H ₂ S exposure monitors
Sour Gas Development Planning and Approval	5	Task force investigation of improved surface/subsurface planning
	7, 32, 33	Applicants for wells to provide project and area planning information and to consider use of existing infrastructure
	17, 18, 19	Standardize dispersion and risk assessment modelling
	34	EUB/government/agency coordinated policy and application review
	38, 41-44	EUB hearings and decisions
	39, 40	Rewrite <i>Guide 29</i> and make hearings user friendly
Sour Gas Operations	21	Review requirements for older sour gas pipelines, ensure that there is adequate attention to corrosion failures
	22	Review adequacy of third-party damage prevention for sour pipelines
	24	Publicize requirements to convert existing pipelines to sour service
	30	Accelerated enforcement where noncompliance threatens health and safety
Emergency Preparedness	15	Follow-up on major releases
	55, 56	Assess capability to implement ERP and increase ERP audits/tests
	57, 63, 64	ERP guide and requirements to coordinate responder roles
	65	Capability to monitor significant release events
	66	Clarify and coordinate monitoring roles and responsibilities
	87	Infrastructure/resources for Aboriginal community ERP
Information, Communication, and Consultation	16	Review, organize, and enhance access to EUB data
	31	Increase the availability of information regarding enforcement actions
	45-48	Perception of EUB's neutrality
	69, 70, 71, 72, 74	Establish EUB public consultation staff resource team
	73	Establish EUB information office
	79	Determine local benefits from sour gas development
	81	Develop public materials re: role of EUB (CD-ROM, videos)
		Total Ongoing = 45

HEALTH EFFECTS AND SOUR GAS RESEARCH—STATUS OF RECOMMENDATIONS UNDER WAY

Recommendations 9 and 59: Update Health Effects Information on H₂S and SO₂

Lead Agency/Branch – Alberta Health and Wellness

Quarterly Update

AHW established a multistakeholder expert advisory committee to evaluate the current health effects literature on H₂S and SO₂. A consultant was retained to review the current literature on H₂S and SO₂ health effects and report to the committee. The review has been completed for H₂S. The final report is currently being prepared for printing, and copies of the report will be made available to a broad audience.

AHW is also currently engaged in a process that will revise the existing H₂S health effects table. This revision will include a review of the completed H₂S report along with concentration and time elements. The EUB will use these revised tables in addressing the recommendations on standardized dispersion modelling, emergency response planning, and setbacks (Recommendations 17, 18, and 19; 55 and 56; 52 and 53; 58 and 62; 57, 63, and 64; and 87). The timeline for delivery of the revised tables to the EUB is year-end 2002.

Phase two of the literature review now under way is focused on SO₂. The available literature on SO₂ is extensive and requires more resources and time than first anticipated. However, AHW, in partnership with Alberta Environment, is undertaking the review of the SO₂ literature with a targeted deadline of spring 2003 for completion of the review and preparation of a report, and fall 2003 as the deadline for the revision of the health effects tables on SO₂.

Advisory Committee Comments

The Advisory Committee notes that the H₂S report is due by the end of June, with the SO₂ report to follow by the end of September (acute and chronic effects to acute exposure). Additionally, that the resulting final H₂S and SO₂ Health Effects tables are expected by year-end. The Advisory Committee points out that because many other public safety and sour gas recommendations depend upon the Health Effects tables, and because the tables are so important to the public, this work needs to be completed as quickly as is possible. Future sour gas research, dependent upon the H₂S and SO₂ final reports, and health effects work for sour gas mixtures and products of incomplete combustion, should (at the very least) be in the planning stage. This would allow research to move ahead as soon as possible.

The Advisory Committee reminds Alberta Health and Wellness that the final Health Effects tables need to provide for quantitative toxic load calculations for use in EPZ and risk assessment work.

The Advisory Committee suggests that the immediate formation of the recommended Scientific Review and Advisory Committee would assist in advancing the work.

Project Team Response

The H₂S literature review is complete and the report will be available shortly. Work is under way to include time and concentration elements needed for quantitative toxic load calculations. This is scheduled to be completed by year-end 2002. The SO₂ literature review is under way and is scheduled to be completed in the fall 2003. The change from the original schedule is due to the volume of existing available literature and the resulting resources and time requirements.

Recommendations 10 and 11: Develop Sour Gas Research Strategies

Lead Agency/Branch – Alberta Health and Wellness

Quarterly Update

The work to address these recommendations was scheduled to start during the first year of PS&SG (2001) but was deferred until after the review of the health effects data (Recommendations 9 and 59) has been completed. AHW is now pursuing these recommendations with other partners in research.

Advisory Committee Comments

See comments for Recommendations 9 and 59 (above).

Project Team Response

AHW is pursuing these recommendations with other research partners.

Recommendation 12: Establish Coordinated, Consistent Medical Response to H₂S Exposure

Lead Agency/Branch – Alberta Health and Wellness

Quarterly Update

The work to address this recommendation will begin after the review of the health effects data (Recommendations 9 and 59) has been completed. AHW has now made initial contact with representatives of Alberta Human Resources and Employment and the province's Chief Medical Officer of Health to discuss the appropriate response to this recommendation.

Advisory Committee Comments

The Advisory Committee does not agree that work on recommendations 12 and 13 (medical response to H₂S exposure and 'knock-down' registry) need await the new Health Effects tables before proceeding.

Project Team Response

AHW has entered into discussions with Alberta Human Resources and Employment and the province's Chief Medical Officer of Health to discuss the appropriate response to this recommendation.

Recommendation 67: Develop Personal H₂S Exposure Monitors

Lead Agency/Branch – Alberta Health and Wellness

Quarterly Update

The project team first undertook an assessment of existing tools and was able to identify gaps in current technology. In order to fulfill the intent, a consultant was hired to develop a portable H₂S personal exposure monitor. A prototype unit has been developed and lab tested. An advanced prototype is scheduled for field testing sometime in November 2002, if all of the technical issues are adequately addressed. Next steps will depend on the success of the field test.

The team has determined that the development of contaminant-specific personal exposure devices is resource and manpower intensive. Computer program development and technical issues need to be addressed in a timely manner. AHW has been focused on the development of the H₂S equipment, as H₂S is the contaminant of most concern. It is not feasible to develop multiple new contaminant exposure measurement technologies concurrently.

Advisory Committee Comments

The Advisory Committee notes that the monitors being developed will only measure H₂S, while the recommendation called for the measure of sour gas-related substances. Consideration should be given to expanding this work to include other substances found in sour gas mixtures.

Project Team Response

AHW will continue with the development of the portable H₂S monitor, as it believes that H₂S is currently the contaminant of greatest concern in Alberta. Concurrent development of monitoring equipment for more than one contaminant is not feasible because of resource and manpower requirements.

SOUR GAS DEVELOPMENT PLANNING AND APPROVAL—STATUS OF RECOMMENDATIONS UNDER WAY

Recommendation 5: Task Force Investigation of Improved Surface/Subsurface Planning

Lead Agency/Branch – EUB Public Safety Implementation Team

Quarterly Update

A senior government steering committee has been formed to guide the work on Recommendation 5. The steering committee is co-chaired by the EUB Chairman and the Deputy Minister of the Department of Energy; other members include Deputy Ministers from Municipal Affairs, Sustainable Resource Development, and Alberta Environment. A working level committee comprising staff from each of the five organizations mentioned above will work with the steering committee to develop a consensus approach for considering Recommendation 5. One approach might be to better define issues and possible solutions through further discussions with potentially affected stakeholders.

Advisory Committee Comments

The Advisory Committee appreciates the importance of this particular recommendation and the very complex issues involved. Also, that there is potential for this recommendation's outcome to impact the way other recommendations are implemented. All said, the Advisory Committee questions the apparent slow rate of progress in proceeding with this recommendation, particularly considering possible expansion plans by the City of Calgary into sour gas areas. In the expanded text of this recommendation, many possible actions for work needed to address this recommendation are described. While some actions are major, others are less so and are already in use in other parts of the province. The Advisory Committee sees no indication that these possible actions are being looked at.

The Advisory Committee specifically recommended the formation of a task force of senior decision makers to look at this matter. There is no indication that such a task force has been formed. Whatever means are chosen to advance this recommendation, the Advisory Committee stresses the importance of expediting the work as well as including all stakeholder groups identified in the complete text of this recommendation.

Project Team Response

A senior government committee has been established to guide work on this recommendation.

Recommendations 7, 32, and 33: Applicants for Wells to Provide Project and Area Planning Information and to Consider Use of Existing Infrastructure

Lead Agency/Branch – EUB Applications

Quarterly Update

An EUB team has prepared a draft policy proposal to address planning and proliferation issues for sour gas development near people. The team has conducted an initial review with some members of the Advisory Committee, as well as some industry and community stakeholders, to ensure that the team is heading in the right direction and that the draft

proposal meets the intent of the recommendations. Over the next several weeks, the team will meet with industry associations, community groups, and other stakeholders to obtain their feedback on the proposal.

Depending on the extent of stakeholder feedback, the team will determine whether the proposal requires substantial revision or work can begin on a draft interim directive (ID).

Following the current schedule, the draft ID on planning and proliferation would be published in February 2003. The new policy is expected to result in significant changes to the applications process, and it is anticipated that these changes will be incorporated into the *Guide 56* rewrite.

Recommendations 17, 18, and 19: Standardize Dispersion and Risk Assessment Modelling

Lead Agency/Branch – EUB Compliance and Operations

Quarterly Update

Recommendations 17, 18, and 19 relate to the development and maintenance of a standardized hazard and risk analysis protocol. The objective is to provide clarity to the public and industry by providing a benchmark for comparison in sour gas developments. This will be achieved through two separate protocols for hazard and risk analysis.

The hazard analysis component is the basis for calculating EPZs for sour wells and pipelines. The new EUB software will calculate the EPZ distance using dispersion modelling and a health effect end point that accounts for both H₂S concentration and exposure time. This toxic load end point will be provided as part of the work under Recommendation 9. This protocol will eventually become a mandatory part of sour licence applications and interventions and will supersede the simplistic nomographs currently used to calculate an EPZ.

A key project milestone is the completion of the draft technical description and formulations document, which is currently being peer reviewed. After EUB testing, the software suite will also be peer reviewed; this is currently planned for January 2003, when the health effect end points are available. Subject to satisfactory testing, the project team anticipates that the protocol to calculate an EPZ will be finalized early in 2003 and implementation will be undertaken as part of Recommendation 58.

The second component required to address the intent of these recommendations is the calculation of the risk from sour developments. The risk protocol will be based on the work undertaken for calculating an EPZ but with the addition of an incident frequency component. A draft consultant's report on the *Determination of Sour Well and Pipeline Failure Frequencies* has now been completed and will be reviewed by the EUB. Much of the stakeholder involvement to date has focused on the hazard analysis, and further feedback on risk will be sought after the EPZ protocol has been completed. The risk protocol will also feed into the setback review under Recommendations 52.

Stakeholder concerns have been raised regarding the mechanism for ensuring that the protocols remain current. To satisfy this concern and the intent of Recommendation 19, the EUB plans to create a protocol advisory group (PAG), which will meet periodically to review the protocols to ensure that new science and techniques are incorporated.

Advisory Committee Comments

The Advisory Committee recognizes that the completion of this work is dependent on the completion of certain other recommendations (e.g., 9). It believes however, that much of the work on the recommendations could go forward so that the final product can be available as soon as other prerequisite work is completed. The Advisory Committee notes that this work is proceeding, and encourages its continuance so that the final product is available as soon as possible.

Project Team Response

Although dependent on Recommendation 9, development work continues on Recommendations 17, 18, and 19, so that the final products will be available as soon as possible.

Recommendation 34: EUB/Government Agency Coordinated Policy and Application Review

Lead Agency/Branch - EUB Applications

Quarterly Update

A stakeholder team has developed a draft protocol to address three issues:

- 1) the process for input of RHAs and AHW in EUB policy development or review where health matters are involved;
- 2) early involvement of RHAs in the preapplication process for sour gas developments; and
- 3) a process to address the need for ongoing dialogue between EUB field centres and individual RHAs. The dialogue would be directed towards information sharing, awareness, and support on matters of mutual interest and would not be restricted to sour gas.

Representatives from RHAs and AHW have participated in the development of the protocol and have taken the proposal to their respective organizations for review. The team hopes to finalize the protocol during the next quarter.

Proposed changes to the EUB's emergency preparedness requirements will improve the involvement of RHAs and other local government agencies in the preapplication process for sour gas development. The proposal under discussion envisages that oil and gas operators will be required to consult and disclose project information to all local government stakeholders, including RHAs at the preapplication stage. This change to the public consultation and disclosure requirements would provide for earlier consultation with local government bodies and facilitate earlier identification and resolution of issues specific to emergency preparedness and response.

Subsequently, meetings will take place with local municipal governments, Alberta Environment, the Alberta Department of Energy, and others to decide how the existing processes can be streamlined to involve all interested parties at an earlier stage. The solution will likely involve an agreement on policy development protocol and more complete application disclosure by the operator.

Advisory Committee Comments

Based on the EUB's anticipated deliverable for this recommendation, the Advisory Committee questions the original clarity of its two-part recommendation. A description of the Advisory Committee's intent for recommendation 34 is as follows:

Where policy development is concerned, the Advisory Committee wants to see the meaningful inclusion of other departments/agencies in the development of EUB policy. The Advisory Committee believes that their successful involvement in policy development would largely remove the need for these same departments/agencies to intervene at EUB hearings since their positions would be represented in EUB policy. It is therefore essential that Municipal Governments, RHAs, AH&W, Aboriginal Groups (at a senior level), and others, be involved in the establishment of policy. For recommendation 34, success in the policy-making arena is considered of paramount importance relative to the application component of this recommendation.

Where applications are concerned, it is recognized that notwithstanding the involvement of other departments/agencies in policy development, there will be cases where they wish to be involved in the review of specific applications. The Advisory Committee therefore recommended development of processes for their early, efficient and effective involvement.

(The Advisory Committee has subsequently clarified that its reference is to EUB policies, practices, requirements, and procedures related to sour gas, as opposed to government policies.)

Project Team Response

Since the Advisory Committee's comments were issued in July 2002, significant progress has been made on the issue of involving AHW and RHAs in EUB policy development related to health matters. A draft protocol has been agreed to by all parties that, if approved by senior decision makers, will facilitate the meaningful involvement of health authorities in policy making on health matters and in the preapplication process for development applications.

In the next quarter, following the approval of the health policy protocol, the team intends to engage local government stakeholders to discuss similar protocols for involvement in EUB policy-making and preapplication processes.

Recommendations 38 and 41-44: EUB Hearings and Decisions

Lead Agency/Branch - EUB Applications

Quarterly Update

The five recommendations focus on improving how the EUB hearing process for sour gas projects deals with issues of public interest, particularly public health and safety concerns.

In response to the recommendations, the following actions continue to be taken:

- Hearings are scheduled or rescheduled to provide sufficient preparation time.
- The EUB holds information sessions as needed that educate and support public participants and that provide information about available resources.
- The Board uses prehearing meetings, where appropriate, to outline issues and explain the benefits of an interrogatory process to all parties. (An interrogatory process provides structure on the exchange of information on technical and complex issues.)

- EUB staff actively identify issues to determine what type of expertise is required and available for a hearing.
- EUB decision reports provide an evaluation of the pertinent evidence and the reasons for the Board's decisions.

Recommendations 39 and 40: Rewrite *Guide 29: Hearing Process* and Make Hearings User Friendly

Lead Agency/Branch - EUB Law

Quarterly Update

The revised draft *Guide 29: Energy and Utility Development Applications and the Hearing Process* completed its stakeholder engagement process at the end of August 2002.

The project team is currently analyzing feedback and finalizing the guide for public rollout in January. The Board will hold workshops in Calgary and Edmonton to introduce the guide and provide additional information about the EUB's hearing process. Further, the project team will continue to be available throughout Alberta to provide hearing participants with information about the EUB hearing process.

Once published, *Guide 29* will be updated periodically, as required, to ensure that information on the hearing process reflects current EUB procedures, is user friendly, and is accessible to all stakeholders.

SOUR GAS OPERATIONS—STATUS OF RECOMMENDATIONS UNDER WAY

Recommendation 21: Review Requirements for Older Sour Gas Pipelines, Ensure That There Is Adequate Attention to Corrosion Failures

Lead Agency/Branch - EUB Compliance and Operations

Quarterly Update

The need to develop a protocol with a special focus on corrosion-related pipeline failures was previously identified through ongoing EUB pipeline leak monitoring prior to the Sour Gas Recommendations being released. Therefore, much of the work on Recommendation 21 has been completed with regard to corrosion failures. For example:

- *Guide 66: Pipeline Inspection Manual* was developed and implemented in November 2001.
- Field Surveillance implemented the OSI program in April 2002 and continues to evaluate pipeline corrosion mitigation programs. The OSI program prioritizes inspections based on previous operator history, sensitivity of the site, and the inherent risk of the facility.
- Canadian Standards Association (CSA) struck a technical committee to increase the emphasis on sour gas pipeline standards in December 2001.

The project team is currently evaluating the effects of *Guide 66* and the OSI program implementation.

With respect to the CSA program review, it must be noted that this was not initiated in direct response to the PS&SG recommendation. CSA's focus is on the increased emphasis on sour gas pipeline standards and only in part on corrosion. Therefore, the CSA work will be considered under this initiative in conjunction with the *Guide 66* and OSI program evaluations that will take place at the end of 2003.

Recommendation 22: Review Adequacy of Third-Party Damage Prevention for Sour Pipelines

Lead Agency/Branch – EUB Compliance and Operations

Quarterly Update

This project addresses the prevention of damage by third parties to all pipelines, including sour gas pipelines.

Currently the EUB is redrafting amendments to the Pipeline Regulation to address a number of issues, including prevention of third-party damage to pipelines. Once the draft amendments are available, they will be circulated to external stakeholders in November and December 2002. After stakeholder review, amendments will be forwarded to Legislative council for processing and the amendments will be proclaimed.

It is anticipated that this project will be completed by May 2003, when the amendments to the Pipeline Regulation are proclaimed.

Recommendation 24: Publicize Requirements to Convert Existing Pipelines to Sour Service

Lead Agency/Branch – EUB Compliance and Operations

Quarterly Update

In response to the Advisory Committee's comment that reclassification requirements must be made widely known, not necessarily revised and documented, the project team believes that existing CSA codes and EUB pipeline regulations are confusing.

The team suggests that describing all requirements in a common ID would

- improve industry understanding of conversion application requirements,
- improve the understanding of technical review requirements for EUB staff, and
- act as a communications tool for the consolidated requirements.

A review of CSA standards for sour service pipeline materials, design, construction, pressure tests, and operations was completed as of June 2002. Other technical references were also reviewed at this time.

A draft ID for sour service requirements is currently being prepared and will be reviewed internally by EUB staff before broader stakeholder engagement with CAPP, SEPAC, and individual companies begins from October through December 2002.

Advisory Committee Comments

The Advisory Committee notes that the deliverable and the recommendation are not directly linked. The Advisory Committee wanted the reclassification requirements, including any necessary upgrading, to be made more widely known, not necessarily revised and documented.

Project Team Response

The project team believes the existing CSA codes and the various EUB regulations could be confusing. The team considers that this situation can be improved and made clearer through a new ID. In this way, the requirements can be made more widely known to all stakeholders.

Recommendation 30: Accelerated Enforcement Where Noncompliance Threatens Health and Safety

Lead Agency/Branch – EUB Compliance and Operations

Quarterly Update

In January 2002, a multistakeholder committee comprising the EUB Corporate Compliance Branch, CAPP, SEPAC, and other industry representatives was convened to review *Informational Letter (IL) 99-4: EUB Enforcement Process, Generic Enforcement Ladder, and Field Surveillance Enforcement Ladder*.

Based on its analysis, the enforcement review committee is developing a revised draft of *IL 99-4* to be completed in October 2002. A second draft of the IL will be produced in November 2002 and presented at internal and external stakeholder workshops for feedback.

The team estimates that the finalized IL can be published in March 2003, resulting in improved enforcement ladders for public health and safety noncompliance matters.

EMERGENCY PREPAREDNESS—STATUS OF RECOMMENDATIONS UNDER WAY

Recommendation 15: Follow-up on Major Releases of Sour Gas

Lead Agency/Branch – EUB Compliance and Operations

Quarterly Update

Trial implementation of the EUB's *Draft Incident Response and Reporting Protocol* has now been completed and the results will be assessed. An exercise on the *Alberta Emergency Support Plan: Upstream Petroleum Incidents* (Support Plan), which includes the protocol, is scheduled for October 2002, following which the protocol and the Support Plan will be reviewed and finalized.

The deliverable is a process for responding to, investigating, and reporting on upstream petroleum incidents. The project completion date is anticipated to be April 2003.

Recommendations 55 and 56: Audit Process for Operator ERPs

Lead Agency/Branch – EUB Compliance and Operations

Quarterly Update

The project team completed an internal review of existing EUB audit and ERP procedures and compiled a comprehensive inventory of licensed gas facilities and associated gathering systems. Based on input from EUB staff, the team is drafting the ERP approval, audit, and inspection process for industry ERPs.

The project team expects to make draft copies of the protocol and procedures available to all stakeholders by the end of 2002 for input as part of a trial implementation plan. This trial implementation/stakeholder engagement period is expected to take about three months.

The finalized ERP audit process will be incorporated into the EUB's new guide *Emergency Preparedness Requirements for the Upstream Petroleum Industry*. Once implemented, audit and inspection compliance and noncompliance rates will be tracked and reported as performance measures.

Recommendations 57, 63, and 64: Emergency Management Guide and Requirements to Coordinate Responder Roles

Lead Agency/Branch – EUB Compliance and Operations

Quarterly Update

Phase I of the project involves developing a new emergency preparedness guide, *Guide 71: Emergency Preparedness Requirements for the Upstream Petroleum Industry*. The project team prepared a draft guide, which is mainly a consolidation of existing requirements, and provided it to stakeholders for review. Feedback was reviewed by September 2002 and changes are currently being incorporated as required. The consolidated guide is scheduled to be issued in December 2002.

Phase 2 of the project involves a comprehensive review of outstanding issues, many of which are dependent on the results of Recommendations 9, 17, and 59. This review will continue over the next 18 to 24 months.

In response to the Advisory Committee question regarding the 15 ERP issues identified through the stakeholder review, the project team confirms that all 15 will be assessed during the comprehensive review of *Guide 71* over the next 18 to 24 months. Progress will be reported through whatever stakeholder process is used for each issue. Changes will be made to the guide as issues are addressed.

Advisory Committee Comments

The Advisory Committee notes that considerable effort and progress has been made in the area of EPZs and the new ERP guide, including an interim guide and stakeholder review. The Advisory Committee was informed that 15 ERP issues were identified through the stakeholder review. Of these, nine were directly related to sour gas. There was some uncertainty as to how these are being handled. The Advisory Committee emphasizes the importance of dealing with all of these issues, including the non-sour gas matters, and reporting back to stakeholders.

Project Team Response

The project team confirms that all 15 outstanding ERP issues will be assessed during the comprehensive review of *Guide 71* over the next 18 to 24 months.

Recommendation 65: Capability to Monitor Significant Release Events

Lead Agency/Branch – EUB Field Surveillance

Quarterly Update

The focus of this recommendation is to assess existing resources and ensure that adequate capability exists within the province to monitor for events involving significant sour gas releases.

The key deliverables include

- an inventory of the type, sensitivity, reliability, and location of available air monitoring equipment; and
- the development of a set of guidelines for EUB staff to use in the event of an emergency to ensure a consistent approach to the collection, analysis, and dissemination of air monitoring results.

The project team has met with Alberta Environment and a number of air monitoring contractors over the past quarter to begin compiling an inventory of the air monitoring equipment, their capabilities, and their locations throughout the province.

The team is currently reviewing historical data, including the *Lodgepole Blowout Inquiry Report*, to identify any potential shortfalls, additional requirements, and possible strategies that could be employed in the event of an emergency.

The team has developed a protocol for the two EUB air monitoring units to ensure optimal usage and consistency in the procedures used and the results reported.

The team expects to have its final report completed by February 2003.

Recommendation 66: Clarify and Coordinate Monitoring Roles and Responsibilities

Lead Agency/Branch – Alberta Environment

Quarterly Update

Air quality monitoring responsibilities are reflected in the draft *Alberta Emergency Support Plan: Upstream Petroleum Incidents*, which details roles and responsibilities of all responders to be tested through a mock exercise in October 2002. The exercise will involve teams from the EUB, local and provincial governments, and industry. Following this, the document will be modified if necessary and finalized.

Recommendation 87: Infrastructure and Resources for Aboriginal Community ERP

Lead Agency/Branch – EUB Compliance and Operations

Quarterly Update

An assessment of resources and infrastructure available to First Nations and Metis communities in sour gas areas was conducted by the EUB and Alberta Disaster Services. It showed that there is currently adequate coverage under a variety of programs, including those provided by Indian and Northern Affairs Canada and Alberta Disaster Services.

The project team is continuing discussions with stakeholders and to assess whether Recommendation 87 is addressed by the current situation.

The projected end date for resource assessment is December 2002.

INFORMATION, COMMUNICATION, AND CONSULTATION—STATUS OF RECOMMENDATIONS UNDER WAY

Recommendation 16: Review, Organize, and Enhance Access to EUB Data

Lead Agency/Branch – EUB Resources

Quarterly Update

To address this recommendation the EUB is developing a Geographic Information System (GIS) that can be accessed on the Internet. The stakeholder feedback from the demonstrations of the pilot GIS Web site in May 2002 was very positive and has resulted in the decision to produce two versions of the site: a basic unrestricted version and a technical security-enhanced version.

The team is continuing to build these two versions of the GIS Web site and the work plan for data review and validation is currently being written. It is still anticipated that the sites will be available to stakeholders via the Internet by the end of 2002 or early in 2003.

Recommendation 31: Increase Availability of Information on Enforcement Actions

Lead Agency/Branch – EUB Compliance and Operations

Quarterly Update

A revised protocol to publish enforcement actions has been developed following discussions with internal and external stakeholders. Prior to final EUB approval, there will be three months of level-3 and level-4 enforcement data collected. Currently the team is designing an in-house process to gather, maintain, and post information on enforcement actions. Subject to obtaining internal EUB approval, it is expected that level-3 and level-4 enforcements will be published by spring 2003.

Recommendations 45, 46, 47, and 48: Perception of EUB's Neutrality

Lead Agency/Branch – EUB Communications

Quarterly Update

The EUB has held discussions regarding possible options for how staff might further emphasize EUB neutrality. Staff training is a focal point of these discussions. In addition to these discussions, earlier this year a number of EUB staff who regularly deal with the public, received customer service training.

The EUB has begun a proactive communications plan to emphasize the role of the regulator in protecting the public interest. The comprehensive three-year plan includes more work with the media, open houses, youth initiatives (including the EUB Kidzone Web site), higher quality internal communications, and speaking engagements for senior staff, among many other initiatives.

The EUB's three-year communications plan will focus on ensuring that Albertans understand the role of the Board and the clear distinction between the Department of Energy and the EUB.

The EUB is currently working with the provincial Department of Energy on the Industry/Government Funding Model for the EUB.

Recommendations 69, 70, 71, and 74: Establish EUB Public Consultation Staff Resource Team

Lead Agency/Branch – EUB Corporate Support

Quarterly Update

The staff resource team continues to work on the final draft of new and revised expectations and requirements for participant involvement. It is expected that these will be included in the *Guide 56* rewrite. The new participant involvement requirement and its corresponding enforcement for noncompliance are expected to satisfy Recommendation 71.

The revised participant involvement document clarifies EUB expectations with respect to the involvement of First Nations and Metis peoples. These statements have been included after consultation with Aboriginal stakeholders and EUB staff. Existing requirements for consultation with all Albertans, including First Nations and Metis, continue to apply.

Discussions with other stakeholders about training programs for participant involvement are under way, as are discussions about the regulatory expectations for communicating with Aboriginal communities.

Recommendation 72: Landowner Questions and New Facility Application Checklist

Lead Agency/Branch – EUB Corporate Support

Quarterly Update

In response to comments from the Advisory Committee and other stakeholders, the application checklist has been separated from the landowner questions. The landowner questions have been combined with three existing EUB guides (*Guides 62, 17-2, and 17-3*) to form a revised *Guide 62: Responding to Public Concerns about Oil and Gas in Alberta*. This provides a comprehensive set of information for the public on all phases of oil and gas development.

The checklist will be separated from the landowner questions and removed entirely from this recommendation.

Advisory Committee Comments

The Advisory Committee was shown a version of the questions and checklist (a checklist was not intended by the recommendation). The Advisory Committee is generally satisfied with the questions but concerned with the checklist. The Advisory Committee notes that because the questions cover more than sour gas development alone, they should be initiated with a 'phased' approach beginning with the 'most sour' developments. As for the checklist, the Advisory Committee has concerns that it could be misused, and therefore feels it should either be eliminated, or handled carefully – and separately – from the questions. The Advisory Committee also sees a number of 'yes' or 'no' answers to checklist questions that may be more appropriately graded from 'very satisfied' to 'very dissatisfied'.

Project Team Response

The checklist will be separated from the landowner questions and removed entirely from this recommendation.

While the team considered the Advisory Committee's suggestion to phase in use of the questions, feedback from landowners, synergy groups, and EUB management and staff strongly favoured widespread use of the landowner questions. Internal discussions on this point continue.

Recommendation 73: Establish EUB Information Office

Lead Agency/Branch – EUB Corporate Support

Quarterly Update

Initial research into creating an information office has focused on identifying current information resources at the EUB. The EUB is currently considering a number of options.

A public consultation study has been completed that asked Alberta synergy groups and community coalitions about the type of information they feel they need from the EUB. Findings of this study will be analyzed, along with an evaluation of the different information avenues the EUB currently has available to the public.

Recommendation 79: Determine Local Benefits from Sour Gas Development

Lead Agency/Branch – EUB Resources, Economics

Quarterly Update

The stakeholder steering committee agreed it would not meet over July and August and would reconvene in September. While data collection continued over this period, difficulties have been experienced and some gaps still remain. The Recommendation 79 study is expected to move into the analysis stage in November/December 2002 and a final report is expected early in 2003.

At the September meeting the steering committee was updated on the progress of data collection and the committee reviewed the comments made by the Advisory Committee. The steering committee decided it would develop a formal response to the Advisory Committee's comments. In its letter to the Advisory Committee, the steering committee stated that it is eager to reach a mutual understanding of how sour gas setbacks should be treated in the study.

Advisory Committee Comments

A study group was established to implement this recommendation and it somewhat altered the intent. The Advisory Committee generally agrees with the change of this recommendation's intent from 'local' benefits to 'net' benefits. The Advisory Committee believes that the study group determining net benefits should include the cost of sour gas setbacks (where land development is sterilized or significantly restricted), recognizing that this matter is also addressed in Recommendation 53.

The Advisory Committee also notes the intention to evaluate the human health effects and quality-of-life impacts in qualitative terms. While the Advisory Committee accepts that this may be useful, it cautions that these effects can't be clearly identified in quantifiable terms. This is why the Advisory Committee made so many recommendations in its report (to better identify and reduce such negative impacts).

With respect to the land values study (a separate EUB initiative), the Advisory Committee would like to see the report findings incorporated into the study for Recommendation 79, even if this slightly delays publishing the final report.

Project Team Response

The steering committee has responded directly by letter to the Advisory Committee concerning the comments about progress on the implementation of Recommendation 79. While the steering committee appreciates the comments expressed by the Advisory Committee, it had concerns specifically about the request that the study should include the cost of sour gas setbacks. Members of the steering committee agree that the costs of sour gas setbacks are important to understand and should be studied.

However, the steering committee has concerns about how the request could be accommodated within the current study methodology. Furthermore, there is a concern that changing the scope of the study to include additional research at this time would substantially prolong the conclusion of the work.

Recommendation 81: Public Consultation Materials—Role of EUB

Lead Agency/Branch – EUB Corporate Support

Quarterly Update

In its report of July 2002, the Advisory Committee, while acknowledging the work completed on this recommendation, requested that the team provide a brochure outlining the work of the EUB and contact numbers. This has been added to the suite of products already completed.

Publication and distribution of other public materials has continued, with the following highlights:

- the children's Web site (EUBkidzone) <www:EUB.kidzone.com> went live August 30, 2002;
- at the end of August, 1000 *Petroleum Play* booklets had been shipped to schools, with another 700 requests to be filled;
- the *Introduction to the EUB* video has been shown at EUB open houses in Rocky Mountain House, Pincher Creek, and Bonnyville and has been seen by approximately 600-800 people thus far in 2002;
- the Eye on Energy, the EUB/Science Alberta Foundation science-in-a-crate, is complete and available to Alberta schools and communities;
- a CD-Rom outlining the role of the EUB has been completed and is being made available at EUB open houses and at public meetings attended by EUB staff. Plans are to include the CD-Rom on the EUB Web site.

The project team expects to have the brochure completed in the first quarter of 2003.

Advisory Committee Comments

While the Advisory Committee is impressed with the expansion of the original intent of this recommendation, its position is that there remains a need for a brief brochure.

Project Team Response

The EUB will develop a brochure outlining EUB responsibilities and EUB contact numbers.