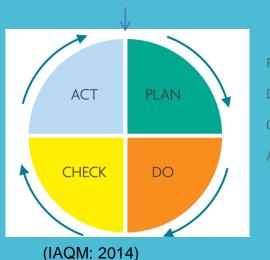




PREVENTION/MITIGATION TASK GROUP Final Report Presentation to the OMT



Plan – establish objectives, needs and processes

Do – implement the plan, execute the process

Check – study the results and compare, review for gaps

Act – determine differences and act to correct or change

Kim Johnson, CAPP
20 April 2015

BACKGROUND



- The Prevention/Mitigation Task Group (PMTG) was formed in June 2014 to carry out the work listed under 'Prevention/Mitigation' in the Odour Management Team (OMT) Project Charter (March 2013).
- □ The dedication of the Odour Assessment and Prevention/Mitigation members to complete deliverables from two task groups is acknowledged and appreciated.
- The group notes its success was due to a combination of member expertise and a positive working relationship with the consultant.



MEMBERSHIP



- Atta Atia, Alberta Agriculture and Rural Development
- Ron Axelson, Intensive Livestock Working Group
- □ Ike Edeogu, Alberta Agriculture and Rural Development
- Kim Johnson, Canadian Association of Petroleum Producers (CAPP) (Shell)
- James Jorgensen, Alberta Environment and Sustainable Resource Development
- Gerald Palanca, Alberta Energy Regulator
- David Spink, Prairie Acid Rain Coalition
- Imai Welch, City of Edmonton
- Alternate/Corresponding Members
 - Abena Twumasi-Smith, Wood Buffalo Environmental Association
 - Alternate: Kevin Warren, Parkland Airshed Management Zone



TASK GROUP OBJECTIVES



The project charter outlines one objective under odour Prevention/Mitigation.

1. To provide a suite of tools to help prevent odour issues from arising that can be applied at the source, the pathway and the receptor.



WORKPLAN OVERVIEW



Vision:

- Odour prevention and mitigation considers odour based on the source-pathway-receptor model.
- Further defined as:
 - The **source** relates to what actually emits the odour.
 - The pathway relates to possible source to receptor routes and what is between, the source and receptor.
 - The **receptor** relates to the person becoming exposed to and perceiving the odour.
- Odour prevention techniques block the linkages in the source-pathway-receptor model, while mitigation options reduce the severity of the odour impact.









TASK GROUP IMPLEMENTATION & BUDGET



To meet their objectives the Prevention/Mitigation task group:

- Met 8 times,
- Spent over 200 hours in and between meetings developing and reviewing deliverables, and
- Stayed within their allocated budget from the OMT.



TASK GROUP DELIVERABLES



Task Group Deliverables	Completion Status and Details		
An inventory of best practices for preventing and minimizing odour and odour-related conflict/complaints at the source, through the pathway and at the receptor.	 Complete. The task group worked with the consultant to review best practices and tools for the prevention and mitigation of odour. The task group provided a presentation to the OMT summarizing their work. 		
Review and recommendations related to the implementation of best practices and applicability in Alberta.	 Complete. The task group included a review of the applicability of each of the best practices. The task group developed a planning chart/guide for using the best practices/tools that were identified. 		

TASK GROUP DELIVERABLES



Intended Audience

Government and industry (but can be understood by the public).

Task Group Considerations for Report

- All deliverables must be tailored to the Alberta context;
- Description of categories of tools will be generic (not single out any particular sector) but will be applicable to sectors operating in Alberta;
- The analysis will be organized by source type, (e.g. point, area, volume, line, single, multiple);
- Tools for both prevention and mitigation must be included (i.e. pre and post construction);
- Tools related to land use planning (both municipal and provincial) must be included; and
- Summary tables must be organized according to the source-pathway-receptor **PMTG** Final Report conceptual model.



WORKPLAN METHODOLOGY



- Step 1: RFP development and consultant selection. The task group and consultant compiled an inventory of currently used tools that prevent and mitigate odours in Alberta, using defined scope and assumptions.
- Step 2: Included task group work and guidance for the consultant to conduct a cross-jurisdictional review of tools being used in other regions to prevent and mitigate odours.
- Step 3: The task group did not identify gaps, i.e. areas where there are currently no tools applied but it may be useful if tools were applied, and any recommendations related to the development and application of tools in the future. Recommended for future work.
- Prevention/Mitigation Assessment Report
 - The group worked together with the consultant to refine the content of the assessment report to align it with their overall vision.
 - Agreed by consensus to accept the report for inclusion in the Good Practice Guide.

REFLECTIONS ON DELIVERABLE



Review of Odour Prevention and
Mitigation Tools for Alberta report
supports the Prevention/Mitigation Task
Group objectives by:

- ✓ Providing an introduction to the role of prevention and mitigation within odour management;
- ✓ Outlining results from the cross-jurisdictional review to identify and inventory best practices for preventing and mitigating odour;
- ✓ Reviewing best practices for managing odour at the interface between odorous activities and receptors;
- ✓ Analyzing best practices to determine their applicability to Alberta; and
- ✓ Providing user friendly guide, summary chart and graphics.



January 16, 2015 Pinchin File: 95009

TABLE OF CONTENTS

1,0	INTROD	OUCTION	
		Clean Air Strategic Alliance Purpose and Scope of Study	
2.0	BACKGROUND		
	2.1 0	Odour	2
	2.2 N	Mechanisms for Managing Odours	4
		2.1 Prevention and Mitigation	
		ource-Pathway-Receptor Conceptual Model	
	_	3.1 Source Types	
		3.2 Pathways 3.3 Receptors	
		Plan, Do, Check, Act Model for Prevention and Mitigation	
3.0	PREVENTION AND MITIGATION CYCLE		
	31 5	creening and Assessment (Plan)	- 11
		Prevention & Mitigation Strategy Development (Plan)	
		mplementation Planning and Execution (Plan and Do)	
		Monitoring and Evaluation (Check and Act)	
4.0	TOOLS	FOR ODOUR PREVENTION AND MITIGATION	16
	4.1 L	and Use and Development Planning	16
		ite Management	20
	4	2.1 Existing, Modified or Proposed Sites	
		1.2.2 Nature of Odorant	
		1.2.3 Land Use and Development Planning	
		1.2.4 Regulatory Regime	
		Raw Materials, Formulation, Process & Operational Modifications	
		Management Planning Groups and Guides	
		Real-time Downwind Monitoring	
		Atmospheric Dispersion Optimization and Pathway Buffering	
		7.1 Atmospheric Dispersion and Source Optimization	
	4	7.2 Shelterbelts and Artificial Windbreaks	32
		ngineering Controls	
		1.8.1 Absorption Systems	
		.8.2 Adsorption Systems	
		.8.3 Biological Treatment Systems .8.4 Thermal Treatment Systems	
		1.8.4 Thermal Treatment Systems 1.8.5 Condensation	
		Masking and Neutralizing Agents	
		Receptor Based Tools	
5.0	CASE STUDIES		43
	5.1 N	funicipal Waste Management Facility	43
		Secondary Food Processing Facility	
		Development of Odour Guidance from Multi Stakeholder Group	
6.0	REFERE	REFERENCES	
7.0	GLOSS	ARY	55
			10401
			D

11









ADVICE TO THE OMT - COMMUNICATIONS



Considerations for OMT as they develop a communications and roll-out plans for the Good Practice Guide.

- Related to the report:
 - 1. Accept the Pinchin report without modification and include as much of the document as possible in the GPG.
 - 2. The PMTG considers the report to be both technical and non-technical in nature.
 - Various aspects of the identified best practices can be implemented by a wide range of stakeholders and includes ready-to-go suggestions and opportunities for escalating the use of additional tools.
- Related to distributing the report:
 - 3. Target government departments to customize a communications plan (for both internal staff and external clients) based on the identified tools for odour prevention/mitigation.
 - 4. Consider a sector specific fact sheet of the identified prevention and mitigation practices and tools.



FUTURE WORK



- 1. The Review of Odour Prevention and Mitigation Tools for Alberta report should be updated regularly and kept current.
 - 5 year period is a reasonable time.
 - Consider how existing tools are being used and identify any new tools.
 - Follow a similar multi-stakeholder process and format as the task group.
- 2. The Odour Prevention and Mitigation Charts and Tools (Appendix A) should be used by industry and subsequently reviewed (every 5 years) to assess the success of the practices.
- 3. The task group recommends conducting a comprehensive gap analysis of odour prevention and mitigation practices and tools in Alberta.
- 4. Conduct a gap analysis based on the consultant review



LINKS TO OTHER TASK GROUPS



Odour Assessment Task Group

Definitions of source types as referenced in Sections 2.1,2.3.1, and 4 (page 48 for definitions).

Enforcement/Role of Regulation Task Group

- Connection with land use planning and regulation (Section 2.2 and 3.6 of the PM report).
 - The Pinchin report does not provide a comprehensive assessment for odour regulations and land use planning.



LESSONS LEARNED



- The PMTG wanted to highlight the multi-stakeholder approach used by CASA and the task group was especially useful and beneficial to the group's products. Each member provided value-added comments, advice and recommendations to each aspect of the deliverables.
- Successful relationship of the consultant working with the task group.
 - Consultant was engaged and open to suggestions and recommendations throughout the development of the report.
 - A detailed RFP, checking references and choosing a consultant with hands on experience
 - Contract development and project management

RECOMMENDATIONS



Recommendation 1: Accept the Task Group's Pinchin report without qualifiers.

The task group recommends the OMT accept their report without qualifiers for inclusion in the Good Practice Guide (GPG).

Recommendation 2: Accept the Task Group's final report.

The task group recommends the OMT accept their final report and the advice and recommendations within, for consideration as the OMT develops their deliverables.

RECOMMENDATIONS



Recommendation 3: Disband the Task Group, after review of the GPG.

The task group recommends they have an opportunity to review the GPG applicable sections to the groups' topic, after which the group should be disbanded as their workplan will be complete.



QUESTIONS?



