

Non-Point Source Project Team Meeting #12

Date: Friday, February 3rd, 2017

Time: 9:00 – 15:00

Place: CASA Office, 10th Floor, #10035 108th Street, Edmonton

IN ATTENDANCE

<u>Name</u> <u>Stakeholder Group</u>

Atta Atia Alberta Agriculture & Forestry (AAF)

Bill Calder Prairie Acid Rain Coalition

Rhonda Lee Curran Alberta Environment & Parks (AEP)
Katie Duffett Clean Air Strategic Alliance (CASA)

Jim Hackett ATCO

Rob Hoffman Canadian Fuels Association (CFA)

Steve Marshman Alberta Canola Association
Alison Miller Imperial Oil Ltd. (CAPP/CIAC)

Rupesh Patel Alberta Transportation
Andrew Read Pembina Institute

Tanya Sakamoto City of Calgary

David Spink Prairie Acid Rain Coalition

Chandra Tomaras City of Edmonton

Martin Van Olst Environment and Climate Change Canada (ECCC)

Scott Wilson Alberta Motor Association (AMA) Ruth Yanor Mewassin Community Council

REGRETS

Name Stakeholder Group

Nadine Blaney Alberta Airsheds Council (AAC)
Jill Bloor Alberta Airsheds Council (AAC)

Tasha Blumenthal Alberta Association of Municipal Districts & Counties (AAMDC)

Nancy Hackett City of Red Deer Lauren Maris City of Red Deer

Karla Reesor Alberta Airsheds Council (AAC)

Action Items	Who	Due
2.1: The NPS Project Team will send Katie any additional NPS resources including information on actions to address NPS in Alberta and any references outside Alberta (i.e. National/International and/or crossjurisdictional reviews).	All Project Team Members	Ongoing
9.5: Ask Environment and Climate Change Canada to forward any Alberta specific health effects data to the Communication Subgroup.	David Spink	Ongoing





10.2: Co-Chairs to review and approve the technical	Co-Chairs	February 22, 2017
10.3: Co-Chairs to review and approve the technical writer scope of work and budget at the next Co-Chairs	CO-Clidits	February 23, 2017
meeting (December 6 th).		
11.1 Revise the recommendation on VOCs from gasoline	Alison Miller	February 23, 2017
distribution as a recommendation to, or for consideration	Rob Hoffman	rebluary 23, 2017
by, Alberta Environment and Parks.	NOD HOIIIIaii	
11.2 Review available emission inventory data to	Rhonda Lee Curran	February 23, 2017
determine if there is information on the proportion of	Kilolida Lee Currali	rebluary 25, 2017
residential heating emissions caused by wood-burning		
appliances and fireplaces.		
	Lauren Maris	Fohruary 22, 2017
11.3 Municipality representatives to provide CASA (to		February 23, 2017
forward to Andrew) any operating and permit	Nancy Hackett Chandra Tomaras	
requirements for residential wood burning appliances		
and fireplaces.	Tanya Sakamoto	Fobrus :: 22, 2047
11.4 Revise the agricultural emissions recommendations	Atta Atia Steve Marshman	February 23, 2017
to specifically identify which research projects are high	Steve Marshman	
priority with regards to addressing non-point source		
emissions.	All music at tages	Fabruary 22, 2017
11.5 Project team members to determine whether	All project team	February 23, 2017
anyone in their organization/network has relevant	members	
expertise to either take the lead or assist in the		
development of a recommendation on construction		
operations and road dust.	D. M.C.M.	F.I
11.6 Develop an initial draft of packaging/prioritizing the	David Spink	February 23, 2017
gaps and uncertainties identified in the TTG final report		
for inclusion in the NPS final report.	D:II Caldan	ACAD
11.7 Finalize a format for the draft recommendations and	Bill Calder	ASAP
distribute to all project team members.	Rhonda Lee Curran Alison Miller	
11.0 Flack out recommendations as much as possible		February 23, 2017
11.8 Flesh out recommendations as much as possible according to the template sent out by the Co-Chairs for	Recommendation	rebruary 23, 2017
discussion during the February 23 rd meeting.	leads	
	Vatio Duffott	ACAD
11.9 Revise the NPS Backgrounder document based on	Katie Duffett	ASAP
initial feedback and then distribute it to the project team.	Katie Duffett	ASAD
11.10 Schedule a municipal caucus teleconference for	Ratie Dullett	ASAP
mid-February. 12.1 Scott/On-Road Light Duty Vehicles Subgroup to	Scott Wilson/On	February 23, 2017
	Scott Wilson/On-	reblually 23, 2017
revise their draft recommendations based on feedback	Road Light Duty Vehicles Subgroup	
from the NPS Project Team.	<u> </u>	Fobruary 22, 2017
12.2 Send Katie/Scott information on the number of	Rupesh Patel	February 23, 2017
electric, hybrid, and gasoline vehicles registered in		
Alberta.	Municipal Courses	Fobrus 22 2047
12.3 Discuss potential development of an urban planning	Municipal Caucus	February 23, 2017
recommendation during their February 7 th		
teleconference.		





12.4 Send the draft recommendation on Tier 4 emissions	David Spink	ASAP
	David Spink	ASAP
standards to Katie for distribution to the NPS Project		
Team.	Montin Van Olat	Fahruary 22, 2017
12.5 Follow up on whether or not the federal	Martin Van Olst	February 23, 2017
government is doing anything related to revising the Tier		
4 limits.		
12.6 Contact Energy Efficiency Alberta and coordinate a	Andrew Read	February 23, 2017
meeting between them and members of the project		
team to introduce the project and discuss the NPS draft		
recommendation ideas.		
12.7 Off-Road Equipment Subgroup to revise their draft	Off-Road Equipment	February 23, 2017
recommendations based on feedback from the NPS	Subgroup	
Project Team.		
12.8 Email the project team information on farming	Steve Marshman	February 23, 2017
practices that have been implemented to reduce		
greenhouse gas emissions.		
12.9 Schedule an additional Municipal Caucus meeting	Katie Duffett	February 23, 2017
for discussion/feedback on draft recommendations as		
part of the stakeholder review process.		
12.10 Send Katie contact information for the Alberta	Scott Wilson	ASAP
Motor Dealers Association so an initial meeting can be		
scheduled for after the February 23 rd NPS Project Team		
meeting.		
12.11 Send Katie the article on electric bus use in	Chandra Tomaras	ASAP
California and the City of Edmonton feasibility study.		
12.12 Follow-up on the process for changing registration	Rupesh Patel	February 23, 2017
costs for on-road heavy duty vehicles and whether or not	'	, ,
it's feasible to recommend reduced registration costs for		
SmartWay members.		
12.13 Andrew/On-Road Heavy Duty Vehicles Subgroup to	On-Road Heavy Duty	February 23, 2017
revise their draft recommendations based on feedback	Subgroup	
from the NPS Project Team.		
12.14 Follow up on the On-Road Heavy Duty Vehicle	Andrew Read	February 23, 2017
recommendation #4 (alignment of weight thresholds) for	Steve Marshman	
clarification on the current situation.		
12.15 Municipal representatives to look into what	Chandra Tomaras	February 23, 2017
indicators/measures they use to quantify levels of traffic	Tanya Sakamoto	
congestion.	Nancy Hackett	
	Lauren Maris	
12.16 Follow-up on whether or not Alberta	Rupesh Patel	February 23, 2017
Transportation has any long term strategies for		
transportation corridors, nodes, and efficient routes and		
send that information to Katie.		
12.17 Send draft recommendation template to the Co-	Katie Duffett	ASAP
Chairs for review and distribution to the project team.		1.5
Chans for review and distribution to the project team.	l	<u>l</u>





12.18 Put draft recommendations into the revised	Recommendation	February 22, 2017
template by February 22 nd (or earlier if possible) for	Leads	
discussion at the February 23 rd meeting.		

Agenda

- 1. Administrative Items
 - a. Greetings and meeting quorum
 - b. Approve the draft agenda and meeting objectives
- 2. Meeting Overview
 - a. Review of meeting purpose/outcomes
 - b. Summary of discussions & progress on transportation recommendations
 - c. Review recommendation template and information needs
- 3. On-Road Light Duty Vehicles Draft Recommendations
 - a. Overview of draft recommendations
 - b. Identify any needed changes/additions to the draft recommendations
 - c. Discussion of knowledge gaps/information needs
- 4. Off-Road Equipment Draft Recommendations
 - a. Overview of draft recommendations
 - b. Identify any needed changes/additions to the draft recommendations
 - c. Discussion of knowledge gaps/information needs
- 5. Stakeholder Engagement
 - a. Plan for initial engagement
 - b. Essential stakeholders
 - c. Timeline for engagement
- 6. On-Road Heavy Duty Vehicles Draft Recommendations
 - a. Overview of draft recommendations
 - b. Identify any needed changes/additions to the draft recommendations
 - c. Discussion of knowledge gaps/information needs
- 7. Next Steps
 - a. Review action items
 - b. Review deadlines for further recommendation revisions
 - c. Next meeting (February 23rd, Edmonton)
- 8. Adjournment

1. Administrative Items

The meeting was called to order at 9:00 by Rhonda Lee and there was a round table of introductions.

The agenda was reviewed and approved with minor changes.

2. Meeting Overview

The Transportation Subgroups had been meeting in person and via teleconference since the December NPS Project Team meeting in order to develop the draft recommendations for review at the current meeting.





A draft recommendation template will be developed and sent to the recommendation leads so the recommendations can be presented in a consistent format.

The project team was asked to consider performance measures both for implementation and effectiveness of recommendations.

Whether or not the NPS project scope includes recommendations relating to already existing regulations was briefly discussed and was added to the discussion under the off-road equipment agenda item.

3. On-Road Light Duty Vehicles Draft Recommendations

Scott provided an overview of the recommendations considered by the On-Road Light Duty Vehicles Subgroup. Feedback from the project team is summarized below. The recommendations were discussed out of order based on their linkages to each other.

Recommendation #1: The Government of Alberta is encouraged to work with motor dealers and related associations to develop and implement financial and supportive incentives to increase the purchase of lower emitting vehicles, including HEVs, PHEVs, and EVs in Alberta.

- The wording should reflect more efficient/lower emitting vehicles rather than specifying vehicle type (hybrid, electric, etc.). The type of vehicle being replaced can be included as a consideration.
- Local governments should be included as a stakeholder.
- The rationale section should be strengthened and the same rationale can be used for recommendations with the same theme.
- Financial incentives may not be as effective as supportive incentives given the highest polluting vehicles are owned by people who may not be able to upgrade.
- Financial incentives to reduce the cost of lower emitting vehicles to on par with gasoline vehicles are used in other provinces but there is a limit to how many rebates can be given during a year.
- Some incentives (e.g. preferential parking) would be better included under a different recommendation given it deals with infrastructure.
- The number of Albertans utilizing financial incentives was raised as a performance measure.

Recommendation #2: The Government of Alberta is urged to implement a requirement that new vehicle dealerships offer a specific proportion or amount of lower emitting or zero emission vehicles for sale in Alberta.

- A performance measure can be added for the number of lower emitting vehicles purchased.
- There will need to be some benefit to the dealerships if they're required to use a portion of floor/inventory space on lower emitting vehicles and they aren't selling quickly. Financial incentives from recommendation #1 may help. Other jurisdictions have also successfully used credit systems.
- This recommendation can be made more palatable to dealerships if a phased approach is implemented. An example of this is the four phased energy transition strategy used by the City of Edmonton.

Recommendation #5: The Government of Alberta, with the involvement of municipalities and industry, is encouraged to increase the amount of infrastructure to support low/zero emission vehicles through partnerships and coordination between different levels of government and the private sector.





- The federal government should be included as a stakeholder.
- This recommendation can be clustered with the others relating to increased uptake for zero/low emitting vehicles.
- Copenhagen is a leader in EV infrastructure and can be used for ideas on how to incent EV vehicles.
- Regarding the final report, the strategies used by other jurisdictions should be included but the recommendation doesn't have to contain an exhaustive list of possible incentives/disincentives.
- The biggest block to uptake of EVs is range anxiety; better infrastructure is critical to increasing use of these vehicles.

Recommendation #3: The Government of Alberta is encouraged to collaborate with municipalities, private sector, and other stakeholders to coordinate efforts to increase awareness of existing initiatives to reduce emissions from personal vehicles. Examples of existing initiatives include: driver education (eco-driving), reducing unnecessary idling, carpooling, public transit, active transportation, purchase of low emission and/or right sized vehicles, highlighting efforts of companies with innovative programs that provide carpooling for staff or use LEV fleets, etc.

• The number of EVs registered in Alberta has been increasing and is at 240, but there are millions of gas vehicles. There is a small demand for lower emitting vehicles, and that needs to be increased.

Recommendation #4: The Government of Alberta, with the involvement of the vehicle repair industry and related stakeholders, are urged to determine the potential scope and environmental impact of vehicle emission control system tampering in Alberta through review of available information in Alberta and other jurisdictions. Based on this review, and if warranted, the Government of Alberta is encouraged to reduce vehicle emission control system tampering through appropriate changes to the Vehicle Equipment Regulation and subsequently the Automotive and Light Truck Inspection Manual.

- There was interplay between discussions on light duty vehicle and heavy duty vehicles. Older vehicles (e.g. model years 2006 to 2010 HDVs) are more likely to have emissions control systems tampering because the technology didn't perform as well as it currently does. Concern was raised that this recommendation would punish people who tampered with vehicle emissions controls for better fuel economy when there was no regulation against doing so.
- There is potential for this recommendation to catch people who are modifying their vehicle to use cleaner burning fuels. The wording used should be clear about what is meant by tampering.
- 'Fairness' is worth consideration. It's difficult to convince people to go above and beyond if others are not being asked to change.
- Tampering on older vehicles is a self-limiting problem as vehicles are replaced over time with newer models with better performing emissions control technology.
- The recommendation should be re-written to specify 2017 model year for a go-forward basis, therefore newer vehicles would be targeted with anti-tampering regulation. Further work to assess the prevalence and environmental impact of tampering can then be undertaken and the need for further anti-tampering measures can be discussed once that work is complete.

There was some discussion around the possibility of a recommendation on urban planning. It isn't specific to any vehicle type and wasn't directly addressed by the recommendations from any of the subgroups. The Municipal Caucus will discuss potentially drafting a recommendation during their next teleconference.

Action Item 12.1: Scott/On-Road Light Duty Vehicles Subgroup to revise their draft recommendations based on feedback from the NPS Project Team.





Action Item 12.2: Rupesh to send Katie/Scott information on the number of electric, hybrid, and gasoline vehicles registered in Alberta.

Action Item 12.3: Municipal Caucus to discuss potential development of an urban planning recommendation during their February 7th teleconference.

4. Off-Road Equipment Draft Recommendations

The discussion on whether or not existing regulations should be considered for recommendation development was continued. Specifically, it was regarding a potential recommendation for the Tier 4 emission standards for vehicles greater than 750 hp to be reviewed as was originally planned by the USEPA for 2007. David had prepared a draft recommendation that explained the context and recommends that the Government of Alberta request that Environment and Climate Change Canada consider discussing the issue with the USEPA.

Concern was expressed that the recommendation was out of scope of the NPS Project Team and would open the door for further recommendations on existing regulations rather than keeping a focus on non-point sources that are currently unregulated. Whether or not CASA is the appropriate table was raised, as well as the potential to duplicate ongoing work.

Further discussion is needed at the next NPS Project Team meeting after there's been time to review the draft recommendation and to learn if the federal government is currently doing anything on tier 4 emission standards.

Action Item 12.4: David to send the draft recommendation on Tier 4 emissions standards to Katie for distribution to the NPS Project Team.

Action Item 12.5: Martin to follow up on whether or not the federal government is doing anything related to revising the Tier 4 limits.

Steve reviewed the recommendation from the Off-Road Equipment Subgroup, with feedback on the recommendation summarized below.

Recommendation: Promote the retirement of old Portable Fuel Containers (PFCs), aka jerricans, which have higher VOC emissions, either through publicity or as an exchange program where the general public can bring in PFCs (less than 20L) of older design in exchange for newer eco-friendly PFCs.

- This recommendation has a more personal impact and can raise awareness on environmental friendly changes that individuals can make.
- Similar programs have been done before and have been funded by the private sector rather than by the government; there may be a possibility here to have private sector partners.
- It would be useful to have an ENGO coordinate the program with the government/private sector and the recommendation should be aimed towards that organization.
- Air pollution is a specific part of the mandate of Energy Efficiency Alberta and it would be a logical place to direct this recommendation.





The subgroup identified construction equipment as an area to consider. Addressing emissions from construction equipment would be one of the highest emission reduction opportunities for off-road equipment, and there is an existing best practices guide developed by government and industry, titled "A Guide to Energy Efficient Best Practices for Alberta's Road Building & Heavy Construction Industry". The guide is focused on greenhouse gases but has air emission reduction co-benefits, and would be a potential place to start in terms of developing a recommendation.

Agricultural equipment is the largest emission source in this subcategory and had been discussed by the subgroup. It was stated that incentive plans to upgrade equipment aren't feasible due to the cost of the equipment. There are existing practices for reducing emissions through different farming practices.

Action Item 12.6: Andrew to contact Energy Efficiency Alberta and coordinate a meeting between them and members of the project team to introduce the project and discuss the NPS draft recommendation ideas.

Action Item 12.7: Off-Road Equipment Subgroup to revise their draft recommendations based on feedback from the NPS Project Team.

Action Item 12.8: Steve to email the project team information on farming practices that have been implemented to reduce greenhouse gas emissions.

5. Stakeholder Engagement

The afternoon portion of the meeting was chaired by Bill.

The Project Team will need input from key stakeholders before the recommendations are finalized so that input can be incorporated. Meetings with some stakeholders may be difficult to schedule, so initial contact should be made sooner rather than later. These meetings should be finished by the end of April.

What these meetings look like will depend on the number of stakeholders and which recommendations they're interested in.

It was noted that there should be clarity of language around this aspect of the project, as "stakeholder consultation" and "stakeholder engagement" both have implications that aren't accurate for the NPS project's goal for conversations with the key stakeholders which don't currently sit at the CASA table.

Action Item 12.9: Katie to schedule an additional Municipal Caucus meeting for discussion/feedback on draft recommendations as part of the stakeholder review process.

Action Item 12.10: Scott to send Katie contact information for the Alberta Motor Dealers Association so an initial meeting can be scheduled for after the February 23rd NPS Project Team meeting.

6. On-Road Heavy Duty Vehicles Draft Recommendations





Rhonda Lee and Andrew reviewed the draft recommendations developed by the On-Road Heavy Duty Vehicles Subgroup. Feedback on the draft recommendations is summarized below.

Recommendation #1: Develop and implement incentives (financial, supportive) for purchase and use of lower emitting or zero emission transit, school, and long-haul buses (EV or CNG).

- This recommendation is similar to one put forward by the On-Road Light Duty Vehicle Subgroup and they can be packaged together.
- California partnered with a Canadian company to start using electric buses. The City of Edmonton also did a feasibility study on electric buses. Information from these cases can be used in this recommendation.
- Major municipalities in Alberta are moving towards using EV and CNG vehicles. The recommendation should support those ongoing initiatives.
- EVs are the end goal, but CNG vehicles are a bridge to better options.
- The recommendation could be directed toward the provincial government or municipalities with implementation through preferential contracting of lower emitting vehicles.
- School buses will be more difficult to address given it's a tight margin industry and increased bus fees will not be well received.
- Infrastructure is a key component of this recommendation and will be required for there to be much progress in uptake of EVs and CNG vehicles.

Recommendation #2: Encourage greening fleets through membership with the SmartWay Transport Partnership.

- Some larger trucking companies don't choose to register their trucks in Alberta due to the vehicle registration costs. These companies may be registered with SmartWay through another province.
- Industry, ENGOs, and government, along with Alberta carriers, should all be encouraged to be SmartWay members or partners.
- One potential mechanism is a reduction in registration costs for SmartWay members. This may not be feasible and requires some further exploration.
- This recommendation should be targeted to government given there are a large number of fleet vehicles supplying the government.

Recommendation #3: Encourage greening fleets through financial incentives for fuel efficiency technologies, such as aerodynamic devices, idle reduction devices, or low rolling resistance tires.

The recommendation should focus on education/promotion of technologies rather than providing
incentives, as these technologies are intended to pay for themselves through increased fuel
efficiency. It may potentially be addressed through the previous recommendation on SmartWay
membership.

Recommendation #4: Align the weight threshold within Section 19 of the Vehicle Inspection Regulation with the National Safety Code threshold and adopt National Safety Code 11B in the criteria, at a minimum, for commercial vehicle inspections.

- There's concern this may capture personal pick up trucks when the intent is to impact commercial vehicles only. The lighter vehicles are already being captured due to yearly inspection requirements undertaken voluntarily by some companies.
- More information is needed on this recommendation as there is some question as to if/how there is misalignment and what the implications are.





Recommendation #5: Establish voluntary or mandatory emissions testing and enforcement requirements.

- Laser technology is being used in British Columbia and may be a useful tool to recommend for use in Alberta.
- This could be proposed as a pilot or phased project depending on initial results.
- A method to raise awareness of emissions would be to implement NOx sensors at places like truck stops.
- Carrier Safety Services is an additional stakeholder for this recommendation. They run weigh stations and may have suggestions on how to implement emissions testing.

Recommendation #6: Establishment/Support for development of urban long-haul freight strategies.

- This could include the Edmonton-Calgary corridor.
- Alberta Transportation is working on a long-term freight strategy which may be a useful input for this recommendation.
- It should include support for ongoing/planned strategies.
- A potential performance measure or indicator is traffic congestion. Municipalities may already have a way of gauging changes in congestion and the contributions of heavy duty trucks.
- Additional stakeholders for this recommendation include the Canadian Truckers Association and the Canadian Trucking Alliance.

Recommendation #7: Partnership and coordination between different levels of government related to low/zero emission vehicle infrastructure.

• This should be combined with the infrastructure recommendation put forward by the On-Road Light Duty Vehicles Subgroup.

Recommendation #8: Discourage (or prohibit) vehicle emission control system tampering through changes to the Vehicle Equipment Regulation.

- This should be combined with the tampering recommendation put forward by the On-Road Light Duty Vehicles Subgroup.
- A consideration for this recommendation is that the emissions controls technology does not perform well at cold temperatures.
- The Canadian Truckers Association and Canadian Trucking Alliance are potential stakeholders.

Action Item 12.11: Chandra to send Katie the article on electric bus use in California and the City of Edmonton feasibility study.

Action Item 12.12: Rupesh to follow-up on the process for changing registration costs for on-road heavy duty vehicles and whether or not it's feasible to recommend reduced registration costs for SmartWay members.

Action Item 12.13: Andrew/On-Road Heavy Duty Vehicles Subgroup to revise their draft recommendations based on feedback from the NPS Project Team.

Action Item 12.14: Andrew and Steve to follow up on the On-Road Heavy Duty Vehicle recommendation #4 (alignment of weight thresholds) for clarification on the current situation.





Action Item 12.15: Municipal representatives to look into what indicators/measures they use to quantify levels of traffic congestion.

Action Item 12.16: Rupesh to follow-up on whether or not Alberta Transportation has any long term strategies for transportation corridors, nodes, and efficient routes and send that information to Katie.

7. Next Steps

The next NPS Project Team meeting is scheduled for February 23rd. Recommendation leads were asked to provide their revised draft recommendations by February 22nd for distribution to the project team.

Initial contact will be made with some key stakeholders (AMVIC, AMDA, Energy Efficiency Alberta) with the intent of scheduling meetings following the February 23rd meeting.

Action Item 12.17: Katie to send draft recommendation template to the Co-Chairs for review and distribution to the project team.

Action Item 12.18: Recommendation leads to put their draft recommendations into the revised template by February 22nd (or earlier if possible) for discussion at the February 23rd meeting.

8. Adjournment

The meeting was adjourned at 14:45.

