

**Calgary Metropolitan Region Board
Advocacy Committee Agenda**

January 14, 2021 1:00 PM

Go-To Meeting/Call-In

Meetings are recorded and live-streamed

| | <u>Page</u> |
|--|-----------------|
| 1. Call to Order | Sheard |
| 2. Adoption of Agenda <i>To adopt and/or revise today's agenda</i> | All |
| 3. Approval of Minutes (Attachment) <i>To review and approve the Minutes of May 16, 2019</i> | Sheard 3 |
| 4. Regulatory Challenges-Intermunicipal Shared Water Servicing (Attachment) <i>For Discussion: That the Advocacy Committee discuss potential advocacy to the province on regulatory challenges for intermunicipal shared water servicing and direct administration to support these efforts, as required</i> | Graves 5 |
| 5. Stormwater Use (Attachment) <i>For Discussion: Motion that Advocacy Committee discuss potentially advocating to the Government of Alberta for timely release of the draft Alberta Water Reuse and Stormwater Use Guidebook through appropriate means including, but not limited to: meetings, written correspondence and working with interested member municipalities</i> | Graves 8 |
| 6. Health Challenges in CMR (Attachment) <i>For Discussion: Motion that the Advocacy Committee direct CMRB Administration to:</i> | Esau 11 |
| <i>i. Develop advocacy strategies to increase access to mental health resources in the Region,</i> | |
| <i>ii. Develop advocacy strategies to encourage the Government of Alberta to enhance reporting mechanisms for EMS, and</i> | |
| <i>iii. Work with interested member municipalities to determine if a regional/subregional approach to providing transportation to medical appointments would be beneficial.</i> | |

7. Composting Update (Attachment) Graves **29**
For Discussion: *That the Advocacy Committee direct CMRB Administration to work with interested member municipality administrations regarding common comments on the updated Code of Practice for Composting Facilities, once released, and report back to the Board.*
8. Next Meeting: To be scheduled
9. Adjournment

Advocacy Committee Members:

Mayor Peter Brown (Airdrie)
 Councillor George Chahal (Calgary)
 Mayor Jeff Genung (Cochrane)
 Councillor Delilah Miller (Foothills)
 Councillor Jamie Kinghorn (High River)
 Councillor Tanya Thorn (Okotoks)
 Reeve Amber Link (Wheatland) Vice Chair
 Christopher Sheard, Committee Chair

UPCOMING MEETINGS:

| | | |
|----------------------|---------------------------|--------------|
| Board Meetings | Friday Jan 15 – 9:30 AM | GoTo Meeting |
| Land Use Committee | Thursday Jan 21 – 9:30 AM | GoTo Meeting |
| Governance Committee | Friday Feb 5 – 9:30 PM | GoTo Meeting |

Minutes of the meeting of
the Advocacy Committee of
the Calgary Metropolitan Region Board
held at CMRB Offices on Thursday May 16, 2019

Delegates in Attendance:

Mayor Peter Brown – City of Airdrie
Deputy Mayor Delilah Miller – Foothills County
Councillor Tanya Thorn – Town of Okotoks
Reeve Amber Link – Wheatland County

CMRB Administration:

Christopher Sheard, Chair
Jordon Copping, Chief Officer
Shelley Armeneau, Office Manager

1. Call to Order

Called to order at 9:30 AM

2. Adoption of Agenda

Moved by Mayor Brown, **Seconded by** Councillor Thorn, accepted by Chair.

Motion: That the Committee approve the agenda of the May 16, 2019 meeting as presented.

Motion carried unanimously.

3. Approval of Minutes

Moved by Reeve Link, **Seconded by** Councillor Thorn, accepted by Chair.

Motion: That the Committee approve the Minutes of the March 22, 2019 meeting as presented.

Motion carried unanimously.

4. Advocacy Plan

The Committee provided feedback on the Advocacy Plan, which is intended to introduce the CMRB to newly elected officials and members of the provincial civil service in the Region. Letters to MLAs and Ministers were circulated and discussed. It was suggested that letters also go to the Minister of Transportation and Minister of Infrastructure. The letters will go to the May 24 Board meeting for further review and direction.

Moved by Councillor Thorn, **Seconded by** Mayor Brown, accepted by Chair.

Motion: That the Committee recommends the Board review the letters to MLAs and Ministers as presented.

Motion carried unanimously.

5. Advocacy Topics

The Committee reviewed the list of potential advocacy items and prioritized three topics. A draft regional position paper will be created on these three issues and brought to the Board no later than the August Board meeting. The identified members will work with their own administration, along with CMRB staff, to create the report.

- Improved health services outside of Calgary, including ambulance services (Airdrie & Wheatland County);
- Water and sewer infrastructure (educational backgrounder - Okotoks); and
- Reducing red tape, specifically rules around occupational health and safety (compile member summary reports - Foothills).

Councillor Thorn suggested reaching out to the Alberta Water Council for feedback and possible project opportunities.

6. Vice Chair Selection

Reeve Amber Link self-nominated for the position of Vice Chair by email. There being no further nominations, the Chair moved that nominations cease. Reeve Link was confirmed as Vice Chair of the Advocacy Committee.

7. Next Meeting

Next meeting to be determined at the call of the Chair. Work related to item 5 will be circulated for review and feedback by email.

8. Adjourned at 11:03 AM.

CMRB Chair, Christopher Sheard

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| Agenda Item | 4 |
| Submitted to | Advocacy Committee |
| Purpose | For Discussion |
| Subject | Regulatory Challenges for Intermunicipal Shared Water Servicing |
| Meeting Date | January 14, 2021 |
| <p><i>Motion that the Advocacy Committee discuss potential advocacy to the province on regulatory challenges for intermunicipal shared water servicing and direct administration to support these efforts, as required</i></p> | |
| <p>Summary</p> <ul style="list-style-type: none"> • On March 7, 2019, the Intermunicipal Servicing Committee granted CMRB Administration the authorization to complete a series of work products in support of the Water Roadmap supporting the development of the Growth and Servicing Plan mandated by the Province. • At the May 2019 Advocacy Committee meeting, the Committee reviewed the list of potential advocacy items and prioritized three topics. One of the three prioritized topics was water and sewer infrastructure. • One of the Water Roadmap work products was a workshop on Regulatory Framework for water servicing. CMRB Administration organized a workshop of member municipality elected officials and staff entitled Water Regulation Workshop on June 27, 2019. Guest speakers at the workshop included a subject matter expert from the province regarding water license transfers, among others. This workshop included a prioritization exercise which resulted in the following water servicing topics in the CMR being prioritized: <ul style="list-style-type: none"> ○ Stormwater Use ○ <i>Water Act</i> – Appurtenance / Service Area ○ <i>Water Act</i> – 10% holdback and transfer policy ○ <i>Water Act</i> – Appeals • The Town of Okotoks took the lead on this advocacy topic as the Town has been working toward increasing capacity of its water servicing utility for approximately a decade. Since the last Advocacy Committee meeting, the Town of Okotoks and Foothills County have been working toward a sub-regional strategy for water servicing in their municipalities. This work is ongoing. • The Town of Okotoks prepared draft documents for the Advocacy Committee in support of potential advocacy to the Province regarding regulatory challenges it experienced in the pursuit of additional capacity in its water servicing system. | |

However, these documents may need to be updated, given the ongoing sub-regional collaboration with Foothills County.

Attachments

- DRAFT Regional Water Key Messages (for Province)

1. Administration Request

That the Advocacy Committee discuss potential advocacy to the province on regulatory challenges for intermunicipal shared water servicing and direct administration to support these efforts, as required.

Regional Water Key Messages

Calgary Metropolitan Regional Board (CMRB):

- Established in 2018.
- Consists of 10 municipalities
- The priority is to provide a regional servicing strategy by December 2020 in order to support regional economic development
- CMRB will see member municipalities moving forward faster than the timeline for regional approval as some municipalities are out of water
- Regional cooperation will be critical for the region to succeed

Water in the Regional Context:

- CMRB area has a total water license capacity of XX
- This water capacity can serve a population of YY
- Growth projections show we will reach YY in ZZ years
- Some member municipalities have already maximized their water supply
- Our recommendation and hope is for change to the water licensing system

Regulatory Key Messages:

- Water licensing has been in existence since the late 1800s
- The tool was built on the past and not the future
- How can the toolbox be expanded to accommodate entities like the CMRB and resource sharing? What other tools could be made available both with and without regulatory change?
- Municipalities have always used intermunicipal servicing agreements to share services
→ What tool will replace that? What are the implications to the current agreements?

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| Agenda Item | 5 |
| Submitted to | Advocacy Committee |
| Purpose | For Discussion |
| Subject | Stormwater Use |
| Meeting Date | January 14, 2021 |

Motion that Advocacy Committee direct CMRB Administration to advocate to the Government of Alberta for timely release of the draft Alberta Water Reuse and Stormwater Use Guidebook through appropriate means including, but not limited to: meetings, written correspondence and working with interested member municipalities

Summary

- CMRB Administration collaborated with the Water Table Technical Advisory Group (“Water Table”), CMRB Subject Matter Expert, and municipal experts to develop a background report on Stormwater in the CMR. Like all background reports prepared to date, the purpose of the report is to establish a regional perspective through common definitions, priorities and objectives.
- The ISC recommended to the Board approval of the Stormwater Background Report in December 2019. The Board approved the [CMR Stormwater Background Report](#) in December 2019.
- The Stormwater Background Report identified Stormwater Use as one of the key priorities and advocacy as a key theme for Stormwater in the CMR. It was identified from discussions with municipal administrations that advocating to the Government of Alberta for the timely release of the draft Stormwater Use and Water Reuse Guidebook with clear policy is an important tool for municipalities in a basin closed to new water licenses.
- CMRB Administration held a ‘Water Regulation Workshop’ in June 2019 which also identified Stormwater Use as a priority for member municipalities in the CMR
- In discussions and updates of the various water initiatives of CMRB administration, ISC directed CMRB Administration to refer Stormwater Use to the Advocacy Committee
- A draft Alberta Water Reuse and Stormwater Use Guidebook was circulated to select stakeholders for feedback by the Government of Alberta. The select stakeholders included member municipalities and CMRB Administration. Municipalities provided their feedback individually. The stakeholder comment period on that document closed in March of 2019. To-date, the Government of Alberta has not yet released the draft Alberta Water Reuse and Stormwater Use Guidebook

1. Background

CMRB's membership faces numerous water supply challenges – a progressive provincial stormwater use and water reuse policy can help mitigate these challenges by providing fit-for-use alternatives to using treated potable water.

Definition of Stormwater

“Stormwater is runoff from rainstorms, hailstorms or melting snow that is shed from urban and rural landscapes. Stormwater picks up pollutants, including trash and suspended and/or dissolved solids that impact the quality of downstream water bodies.”

Stormwater is regulated by Provincial Regulations (which define quantity and quality of runoff). The Province, in turn, grants the municipalities jurisdiction over the land use plans that control the nature of engineered structures and operational controls that achieve the broader objectives for quality and quantity.

Regional stormwater servicing within the CMR refers to the collection, conveyance, storage and discharge of stormwater that crosses intermunicipal boundaries through engineered infrastructure or natural drainage (watersheds or wetlands). Stormwater drainage systems are generally at a site or neighbourhood scale. Reservoirs, lakes, rivers, wetland complexes and tributaries in the CMR are not considered to be stormwater infrastructure, but they are the critical natural components of the overall regional stormwater drainage system.

2. Opportunity

The CMRB can advocate to the province for a favourable regulatory and policy regime that creates new opportunities for stormwater use as a mechanism to offset potential water shortages. This includes addressing factors that may restrict municipalities including the timeliness of Provincial approvals and overcoming regulatory barriers to the innovative approaches that have been successfully applied within other water-short jurisdictions around the world.

CMRB's members are actively considering stormwater use projects in their municipalities and would benefit from the timely promulgation and execution of stormwater use guidelines by Alberta Environment and Alberta Public Health. Possible advocacy strategies for the CMRB may include (i) the development of a CMRB-specific Code of Practise for Municipal Stormwater Use that simplify approvals and (ii) supporting additional staffing within the AEP and Alberta Health during the initial roll-out of the Alberta Water Reuse and Stormwater Use Guidebook, anticipated in the near-term.

3. Administration Request

Motion that Advocacy Committee direct CMRB Administration to advocate to the Government of Alberta for timely release of the draft Alberta Water Reuse and

Stormwater Use Guidebook through appropriate means including, but not limited to: meetings, written correspondence and working with interested member municipalities.

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| Agenda Item | 6 |
| Submitted to | Advocacy Committee |
| Purpose | For Information |
| Subject | Health Challenges in CMR |
| Meeting Date | January 14, 2021 |
| <p><i>Motion that the Advocacy Committee direct CMRB Administration to:</i></p> <ol style="list-style-type: none"> 1. <i>Develop advocacy strategies to increase access to Mental Health Resources in the Region,</i> 2. <i>Develop advocacy strategies to encourage the Government of Alberta to enhance reporting mechanisms for EMS, and</i> 3. <i>Work with interested member municipalities to determine if a regional/ subregional approach to providing transportation to medical appointments would be beneficial.</i> | |
| <p>Summary</p> <ul style="list-style-type: none"> • During the last Advocacy Committee meeting it was decided that one of the focus areas for the committee would be health challenges in the CMR. • The City of Airdrie volunteered to compile the background information for further discussion by the Committee. • Attempts were made to contact all member municipalities, however, not all were able to respond by the deadline. • Through discussions with seven (7) member municipalities, three priority concerns were identified <ul style="list-style-type: none"> ○ Access to Mental Health Resources ○ Dissatisfaction with current EMS statistical reporting ○ Transporting residents to medical appointments • As the CMRB is nearing completion of the Growth and Servicing Plans, capacity both in CMRB Administration, as well as member municipalities to work on other beneficial initiatives will become available. | |
| <p>Attachments</p> <ol style="list-style-type: none"> 1. <i>Overview of Health Challenges</i> 2. <i>Municipal responses health challenges questionnaire</i> | |

Background

Delivery of core health services is generally a provincial responsibility, however many municipalities experience demands from their constituents which are tangential to the provincial responsibilities. Working together as members of the CMRB on common concerns can help the province to determine best paths forward and can create economies of scale for delivery of other services, such as transportation to medical appointments.

Recommendation

That the Advocacy Committee direct CMRB Administration to:

1. Develop advocacy strategies to increase access to Mental Health Resources in the Region,
2. Develop advocacy strategies to encourage the Government of Alberta to enhance reporting mechanisms for EMS, and
3. Work with interested member municipalities to determine if a regional/ subregional approach to providing transportation to medical appointments would be beneficial.

**CMRB Advocacy Committee
Overview of Health Challenges/Opportunities in the CMR**

Background

Calgary Metropolitan Region (CMR) municipal health and social technical experts were engaged in individual conversations to determine priority health-related challenges facing their communities. The accompanying background documents provide additional details and highlight possible opportunities to leverage as a region or sub-region to address some of the pressing health issues facing CMR residents. The process successfully engaged six CMRB communities. Information for the remaining four will be added as details are made available.

Many of the issues identified in this overview are extremely complex and require additional research and input from municipal experts to effectively advance further. In general, municipal staff were very appreciative to have an opportunity to discuss health and social issues and were extremely interested in working together with their neighbours to advance high priority items. CMR municipalities have long been advocating individually for many of the issues identified. There was an expressed desire to begin working together to leverage a collective approach to more effectively address/advocate for common issues.

Community Matrix of Priority Issues

| Issue | Airdrie | Calgary | Chestermere | Cochrane | Foothills | Okotoks | RVC |
|---|----------------|----------------|--------------------|-----------------|------------------|----------------|------------|
| Mental Health Access to Resources | X | X | X | X | X | | X |
| Transportation Medical Appointments | X | | X | X | X | X | X |
| EMS Resources Enhanced Metrics & Ambulance Availability | X | | X | X | X | X | |
| Funding Community Services | X | X | | X | | | X |
| EMS Resources Inter-Facility Transfers | X | | | | X | X | |
| EMS Resources Emergency Dispatch* | | X | X | | X | | |
| Funding Medical First Responder Program | X | X | X | | | | |
| Health Resources Urgent Care & Laboratory Services | | | X | X | | | |
| Housing Affordable & Emergency Housing** | | X | | X | | | |

*GOA is assuming the 911 Dispatch Service in Q1 2021.

**CMRB Growth & Servicing Plan will address the current state and possible future ACTION items to address the spectrum of affordable, social and emergency housing in the CMR. Access to housing is closely linked to the mental health of our collectively citizenry.

Potential Issues for Regional Advocacy

| Challenges Identified | Possible Actions |
|--|---|
| Mental Health – Access to Resources | |
| <ul style="list-style-type: none"> • Funding for equitable access to mental resources and programs • Navigating a complex system | <ul style="list-style-type: none"> • Advocate to Province to fund additional preventative and intervention resources • Advocate for one-window approach, multi-pronged to allow access by all generations • Regional list/database of up-to-date resources and messaging for CMR |
| Transportation – Medical Appointments | |
| <ul style="list-style-type: none"> • CMR municipalities have a myriad of programs to support resident access to medical appointments in urban centres | <ul style="list-style-type: none"> • Determine if a regional approach or shared service would benefit communities outside of Calgary |
| EMS Resources – Enhanced Metrics & Ambulance Availability | |
| <ul style="list-style-type: none"> • General dissatisfaction with current EMS statistical reporting • Ambulance availability | <ul style="list-style-type: none"> • Advocate for enhanced reporting mechanisms to allow CMR communities to better determine the level of EMS support in communities • Advocate for enhanced reporting mechanisms to allow CMR communities to better determine the level of ambulance resources in communities. • Closely tied to a review of the inter-facility patient transfer process. |

**City of Airdrie – Health Opportunities & Challenges
CMRB Advocacy Health Backgrounder**

Contact

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Priority Issues

Mental Health

Youth

- Imbalance from regional perspective in outlying communities – lack of equitable access to services
- Suicide intervention programs primarily exist at the Alberta Children’s Hospital in Calgary
- Need to understand what is preventing youth and their families from accessing services in Calgary
 - Cost – travel to Calgary, access to specialists and intervention programs
 - Parental support
 - Youth struggling with mental health issues - sexual identity/health, bullying – experience barriers accessing help in Airdrie
 - Parental consent requirements, lack of parental support
 - Small community, fear of people knowing
 - Resources do not exist in community
 - Where to access appropriate help? Family doctor, school counsellor, friend, adult mentor, online, Community Links
 - Hard for youth to navigate resources and the system
- Lack of early intervention/prevention leads to addictions challenges at later stage
- What’s needed? – A coordinated approach – Schools – Health care – Municipalities
- Airdrie Resource Council, a group of local service providers is working to address - How does a person access the myriad of programs and services available locally, from AHS?
 - When you are in crisis, where and how do you access help?
- **ACTION** - Do we have equitable access to mental health resources?
 - Research could be conducted at the regional level so that the CMR can move from anecdotal information to evidence-based information.

Funding for Community Services

- Recent changes to FCSS altered the scope of what can be funded by Community Links
 - Funding is directed towards education counselling, prevention-based counselling
 - Very short term in nature
 - Funding is no longer provided for clinical counselling services – intervention
 - Clients who require longer term support are referred to AHS – Alberta Mental Health & Addictions

- One more step in process and may require people to access services outside of the community they live in.
- COVID pandemic has quickly moved to digital access to the health system
 - Created a situation where people have become un-networked to access help/resources.
 - Working on their own through the system to try and find the help they or the family needs. Can be extremely frustrating and draining. Some people just give up because they do not have the energy or ability to figure it out.

Access to Medical Appointments

- Airdrie operates Access Airdrie a shared-ride curb-to-curb Accessible public transit service available to residents with disabilities. An applicant is eligible for Access Airdrie if they are a City of Airdrie resident and are unable to use conventional transit services due to a physical or functional limitation, defined as “any condition, either short term or long term”.
- In 2020 this service will operate Monday-Saturday.
- Specialized Medical Trips to Calgary is a curb-to-curb service available five days of the week from 7:00 am to 6:00 pm. Specialized medical trips to Calgary do not currently operate on Saturdays, Sundays or statutory holidays.
- Community Links also provides taxi/transit vouchers for low income individuals and families to access services in Calgary.

EMS Resources

- Airdrie was forced to divest its ambulance service in 2010. No new ambulances have been added to service the City of Airdrie and area, despite the population more than doubling in size over the last 10 years.
- Numerous times when Airdrie ambulances are flexed outside of our zone, leaving a city of more than 70,000 people without an ambulance.
- EMS statistics provided only address emergency response issues at a very high level. There is a need to make the data more accessible and transparent to aid municipalities in determining co-response requirements and whether residents are being serviced at an acceptable level.

Medical First Responder Funding

- Airdrie has advocated for the Province to cover the cost of training fire personnel to be medical first responders for years.

**City of Calgary – Health Opportunities & Challenges
CMRB Advocacy Health Backgrounder**

Contact

Allison Chan, Strategist, Intergovernmental & Corporate Strategy
Deputy City Manager's Office, The City of Calgary
403.268.1709

Priority Issues

Funding for Community Services (Health & Wellness)

- Funding structures for social agencies
- Provincial changes have affected local groups

Housing

Homelessness

- on-going issue
- cross over with mental health and addictions challenges

Affordable Housing

- AUMA resolution on affordable housing – Calgary supported
- Province has indicated they are getting out of the business of affordable housing
 - report should be released mid-December

Medical First Responder Funding

- Calgary has been advocating for the Province to cover the cost of training fire personnel to be medical first responders for years.

Mental Health Resources-Programs-Funding

- Mayor Nenshi's focus this election term is mental health.
- No official City of Calgary position on mental health.
- GOA focus is on treatment beds for addictions rather than harm reduction path.
 - Mayor Nenshi supports the continuum of harm reduction.
- Calgary is left to pick up pieces – police, bylaw, social service agencies.
- Council supported a Notice of Motion on July 30, 2018 – Community Action on Mental Health and Addiction (appended)

NOTICE OF MOTION RE: COMMUNITY ACTION ON MENTAL HEALTH AND ADDICTION

Link: <https://pub-calgary.escribemeetings.com/filestream.ashx?DocumentId=64399>

Report Number: C2018-0956

Meeting: Combined Meeting of Council

Meeting Date: 2018 July 30

Sponsoring Members of Council: Nenshi, Farrell, Woolley, Colley-Urquhart, Farkas, Chahal, Carra

WHEREAS the recent economic downturn has amplified citizen concerns about crime and social disorder;

AND WHEREAS statistics and observation show an increasing amount of social disorder, particularly in the downtown core and at certain C-train nodes, and a sharp rise in crimes against people and property;

AND WHEREAS Council responded by approving a \$20.8 million increase to the 2018 CPS operating budget on 2017 November 30 over and above their \$380 million 2018 annual operating budget;

AND WHEREAS more Calgarians died from accidental fentanyl overdoses in 2017 than from violent crime and motor vehicle collisions combined, while the prevalence of other dangerous street drugs, including methamphetamine, continued to increase;

AND WHEREAS citizen concerns about crime and social disorder highlight the need for a broader community strategy on the complex links between addiction, crime prevention and mental health;

AND WHEREAS there is a need to reduce the stigma of seeking help for mental illness and Calgary has no comprehensive municipal strategy on mental health parallel to our system-wide strategies on homelessness and poverty reduction;

AND WHEREAS Council created a \$5 million emergency resilience fund in 2016 and renewed it in 2017, and allocated \$3 million one-time to initiatives including crime prevention in 2017 and there is currently no funding source identified for the replacement of these funds;

AND WHEREAS allocating funding for the required municipal contribution to the Family and Community Support Services (FCSS) program is necessary to receive matching investments;

AND WHEREAS Calgary is a place of opportunity where we must strive for everyone to be safe and feel welcome;

NOW THEREFORE BE IT RESOLVED THAT Council commit \$25 million from the Fiscal Stability Reserve for Crime Prevention and a new Mental Health and Addictions Strategy over the next five years, with \$15 million allocated to the Community Services Prevention Investment Framework, The City's necessary FCSS contributions, and other short term initiatives in areas, such as Crime Prevention Through Environmental Design, and that the remaining \$10 million be allocated as seed funding for initiatives resulting from the strategy described below;

AND FURTHER BE IT RESOLVED THAT Council direct Administration to convene a community-wide mental health, addiction and crime prevention strategy, modeled on the systems approach taken in the

Ten Year Plan to End Homelessness and Enough for All, involving a broad base of community stakeholders;

AND FURTHER BE IT RESOLVED THAT Council direct Administration to report back to the Standing Policy Committee on Community and Protective Services with:

A) Guidelines for awarding initial funds from the fund using the Prevention Investment Framework with the addition of a mental health and addiction lens, no later than Q4 2018, and;

B) A scoping report and work plan for the development of the community strategy identifying short, medium and long term actions, no later than Q1 2019.

City of Chestermere Health Opportunities & Challenges

CMRB Advocacy Health Backgrounder

Contact

Bernie Morton, CAO, City of Chestermere

Priority Issues

EMS Resources

Emergency Dispatch

- concerned with GOA dispatch changes
- currently there is a 2.5 minute delay from the moment the 911 call is made before it gets routed to local first responders
- EMS co-located with RCMP and Chestermere Fire Department (CFD)
- EMS is available in Chestermere for 12 hours per day – one ambulance, ½ time.
- Outside of EMS operational hours, CFD responds to night time medical calls and EMS is dispatched from Calgary.
- Chestermere invests in medical first responder training for CFD in absence of local 24 hour EMS service.

Seniors

- Access to testing – diagnostics, imaging and lab services – requires transportation to Calgary.
- AHS Laboratory Services – limited operational hours in Chestermere

Mayor's Health Task Force

- Multi-disciplinary team created to more holistically address Chestermere seniors' needs
- Focus is to support the creation of new seniors housing developments that have services co-located on site or near-by
 - Diagnostic equipment
 - Access to support to ensure follow-up, post doctor visits
- Multi-disciplinary team has resulted in two housing proposals submitted for provincial funding.

Mental Health Supports

- Provincial perception is that Chestermere residents can access services in Calgary.
- Provincial funding changes has altered the way services are being offered in Chestermere
 - Municipal downloading

Immigrant Families

- City of Chestermere recently added a Diversity & Inclusion position to enhance cultural outreach.
- Early findings indicate that immigrant families not only need help integrating into the community but are also facing mental health challenges.
- Family support services are foreign to new immigrants. For many these services did not exist in their country of origin, or were not trusted.

Youth

- More mental health supports are needed for Chestermere youth.
 - Youth mental health has worsened during the pandemic.
 - FCSS funding changes resulted in services being moved outside of the community.

Opportunity to Explore

- Mobile units to help deliver services to the region.

- Toronto has had success with using mobile units to address challenges across a diversity of neighbourhoods

Town of Cochrane – Health Opportunities & Challenges CMRB Advocacy Health Backgrounder

Contacts

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Priority Issues

Funding for Community Services

- The Cochrane social sector has lost a significant amount of funding over the past year
- Loss of funding, government and donations, has resulted in the loss of valuable preventative programming that supports mental health, social connection and community building/development
 - Programs to address isolation and facilitate social connections and access to resources
 - Mental health support groups/staffing from a prevention and early intervention perspective

Cochrane Team Health

- Wide variety of representation from health, social and not for profit organizations with a goal of shaping health services for Cochrane and area residents.
- Meet 5 times per year.
- Terms of Reference included in resources page.

Affordable Housing

- Cochrane requires a wide variety of affordable/emergency housing to address a variety of issues identified by the community:
 - emergency shelter/domestic violence
 - affordable seniors housing
 - hospice
 - emergency shelter options to address youth homelessness/couch surfing
 - supportive housing options for individuals with diverse abilities

Access to Medical Appointments

- No formalized medical appointment transportation from Cochrane to Calgary.
- Residents rely on non-profit organizations, church groups and volunteers to provide medical transportation services
 - Often difficult for last minute appointments as rides take time to coordinate
- FCSS provides taxi vouchers to low income individuals and families

EMS Resources

Urgent Care

- After hours residents need to travel to Calgary to access urgent and emergency care
- Inter-city Transfer Unit is co-located with Cochrane Fire Department (CFD) and is staffed by AHS paramedics.

- During times of ambulance shortages in Cochrane, this transfer unit (equipped with basic medical support systems) and the paramedics on shift, is left unutilized. If required, an ambulance is brought in from another zone to cover the local emergency.
- Changes need to be made to the system to better utilize resources.

Reports and Background Studies

Housing Needs Assessment link to final report (Nov 2020):

<https://www.cochrane.ca/DocumentCenter/View/8915/Cochrane-Community-Housing-Needs-Assessment-2020>

Homelessness Estimation Count

- Counts completed on an annual basis in November
- November 2020 numbers just released

Cochrane Cares: A Regional Well-Being Review (June 2017):

https://www.cochrane.ca/DocumentCenter/View/4265/Cochrane-Cares-Final-Report_June15-low-res?bidId=

Youth Homelessness Needs Assessment We have reached out to the Boys and Girls Club for the Youth Homelessness data that was collected in 2014 – will forward it along when we receive it.

**Foothills County – Health Opportunities & Challenges
CMRB Advocacy Health Backgrounder**

Contact

Suzanne Oel, Reeve

Priority Issues

Access to medical appointments

- Current status - Foothills pays for taxi fares to help folks access specialist appointments
- Challenge - timing of and number of appointments
 - Work with health care providers in urban centres to set aside a specific time (day or half day) period for residents from outlying and rural areas to book appointments.
 - Allows transportation options to be more fully utilized (maximizes efficiencies)
- Payment of taxi fares provides Foothills flexibility in participating in a more regional system

Mental Health

Current status

- provincial government provides an array of services in urban centers and online
- municipalities fill in gaps thru the distribution of FCSS & municipal funding.

What does addressing the mental health challenges from a regional perspective?

- Collective Messaging to create sense of stability and hope in regional communications
- Share resources and links on how to get help close to home
- Navigating the system to get information to folks when they need it
 - Updated information resource/sheet that can be easily shared – web-based, printed and over the phone (rural seniors still like to pick up the phone)

EMS Service

Emergency Dispatch

- Concerned about how dispatch will work when GOA dispatch takes over Calgary and Lethbridge
 - Increase in call volume will lead to a degradation of service
 - Loss of local knowledge about location of rural properties

EMS Resources

- Rural ambulances are pulled to answer Calgary calls, when Calgary ambulances are not available
- Foothills County has approximately 10 ambulances located in Okotoks, High River, Priddis, Turner Valley-Black Diamond, Nanton.
- Ambulances in neighbouring counties of Willow Creek and Vulcan County are constantly flexed/out of range, requiring an ambulance from Foothills County to respond to emergencies.
- Response times to rural addresses are high
 - ambulances can be dispatched out of Pincher Creek 2.5 hours away
- very complex issue for municipalities, even more complex for the entire CMR.

Inter-facility Transfers

- Increasing need for the use of medical transportation resources from outlying communities to Calgary hospitals
- Challenge - Lack of local knowledge on non-ambulance equipment that is available (Ex. Specialized transfer units in Cochrane)
- AFRACCS operates in a silo – patient/victim is not being placed first

Prairie Mountain Health Advisory Council

Resources from the Council's engagement on Suicide in the Calgary Zone: How we can equip ourselves to prevent it.

- ASIST, Living Works delivers the program <https://www.livingworks.net/asist>
- [Hope and Healing](#) – A guide for people who have lost someone to suicide
- [Toolkit for people](#) who have been impacted by a suicide loss
- [Toolkit for people](#) who have been impacted by a suicide attempt
- Myhealth.alberta.ca – [Hope and Healing Overview](#)
 - [Helping Children Cope with a Suicide Death](#)
 - [After a Suicide: Everyone grieves in their own way](#)
 - [Healing after a Suicide Death](#)
- [Healing Your Spirit](#) – surviving after the suicide of a loved one
- [Preventing Suicide](#) – Information for health professionals
- [How to communicate about suicide](#) – tips on talking about suicide
- [Addiction and Mental Health programs and services](#) – information on how where to access help
- [Warning Signs of Suicide](#)
- Buddy Up www.buddyup.ca
- [Help in Tough Times](#) – addiction and mental health support and resources
- [Mental Health Helpline](#) – 1-877-303-2642
- [Addiction Helpline](#) – 1-866-332-2322
- [Kids Help Phone](#) – 1-800-668-6868 or text CONNECT to 686868
- Albertans can sign up for Togetherall at: ahs.ca/virtualmentalhealth
- Together4Health is an AHS Community Engagement Platform:
<https://together4health.albertahealthservices.ca/>
- Sign up for the AHS Mental Health Newsletter -
<https://secure.campaigner.com/CSB/Public/Form.aspx?fid=1809774>
 - [Text4Hope](#) - Free daily text messaging services, evidence-based tool that helps people identify and adjust the negative thoughts, feelings and behaviours a pandemic might be expected to provoke
 - To subscribe text COVID19HOPE to 393939.
 - [HeartMath® - Managing Stress](#) – free AHS online course on managing stress during challenging times

Foothills Regional Emergency Services Commission (FRESC).

- Letter and background report sent to Minister of Health, Tyler Shandro, on May 21, 2020 and circulated to CMRB members in Fall 2020

Excerpt from Background Report

- Report in response to Recommendation 34 of the 2019 AHS Review Report. We hope to propose an alternate cost-saving measure along with improved service levels for EMS Dispatch and ask for the opportunity to share the reasons why we believe we can work with your government to achieve all of our goals.
- **Our Proposed Solution:**
 - **Use** existing 911 Dispatch Centers for EMS dispatch and remove duplication of service by AHS, to save costs.
 - **Develop** EMS Dispatch standards or build on the current Provincial 911 Standards to ensure quality of service in an expanded “Collaborative EMS Dispatch Model”, which supports using existing 911 Dispatch Centers.
 - **Reinstate** EMS Dispatch to our Foothills Regional Emergency Services Commission (FRESC).

**Town of Okotoks – Health Opportunities & Challenges
CMRB Advocacy Health Backgrounder**

Contact

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Priority Issues

Access to Medical Appointments

Okotoks currently provides a ride service for residents in need to attend regional medical appointments. Service consists of:
Taxi contract for seniors and/or disabled residents.
Municipal support for a volunteer driver program.
A regional solution would be beneficial to our residents.

EMS Resources

Require greater clarity and access to metrics for response times, ambulance availability, etc.
Alternate transportation for non-urgent patient transfers.
Transfer service presently removes the ambulance outside of Okotoks for several hours at a time.

Rocky View County – Health Opportunities & Challenges
CMRB Advocacy Health Backgrounder

Contact

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Priority Issues

Mental Health

- All rural municipalities struggle with access to Mental Health resources due to:
 - limited availability and hours of service
 - transportation issues to attend appointments
 - centralization of services in major centres.

Access to Medical Appointments

- RVC has one full time operating Specialized Transportation provider servicing Rocky View County residents Monday to Friday.
- Shared ride service.
- Servicing a large geographic area in a cost-affordable and efficient manner is challenging.
- The number of trips per month may be limited due to capacity and cost pressures.

Funding for Community Services

- Increased pressure on funding organizations (Provincial, Municipal, and Charitable e.g. the United Way or Foundations) has increased exponentially this year during the pandemic as donations/fundraising have decreased and costs have increased due to non-profit organizations following Alberta Health protocols and pivoting operations to new service delivery models (e.g. online, smaller group sizes, increased demand, etc.).
- Becomes even more relevant with the release of the Provincial budget in February and anticipated decreases in funding across all departments.

| | |
|---|---|
| Agenda Item | 7 |
| Submitted to | Advocacy Committee |
| Purpose | For Information |
| Subject | Update on Composting Challenges in CMR |
| Meeting Date | January 14, 2021 |
| <p><i>Motion that the Advocacy Committee direct CMRB Administration to work with interested member municipality administrations regarding common comments on the updated Code of Practice for Composting Facilities, once released, and report back to the Board.</i></p> | |
| <p>Summary</p> <ul style="list-style-type: none"> • In a Board meeting on December 5, 2019, Wheatland County described the challenges regarding a composting facility located within the County. A motion was made directing CMRB Administration to report to the ISC regarding organic composting in the Region. • CMRB administration gathered municipal experts from Wheatland County, City of Calgary, Rocky View County and Foothills County administrations to discuss the municipalities' experiences with composting facilities across the Calgary Metropolitan Region (CMR). At the February 2020 meeting of the ISC, the report recommended that the issues experienced relating to the provincially regulated composting facilities be brought to the Advocacy Committee for discussion. • A draft Code of Practice for Composting Facilities in Alberta was released by the province in August 2020. An updated draft may be released in early 2021 with an opportunity for municipalities (and others) to provide feedback. • Given a request for feedback on the revised draft Code of Practice in 2021, there is an opportunity to provide common voice to regulatory framework concerns expressed previously by some member municipalities in the CMR. | |
| <p>Attachments</p> <ol style="list-style-type: none"> 1. <i>White Paper - Alberta Composting Framework, Wheatland County</i> 2. <i>draft Code of Practice for Composting Facilities in Alberta, Government of Alberta, August 2020</i> | |

Background

Much work has been done by municipalities and the waste industry to provide sustainable options for residential and ICI (industrial/commercial/institutional) composting streams and CMR municipal administrations are aware of the challenges related to the regulatory framework under which these facilities are sited.

Member municipality administrations expressed support in collaborating on increasing capacity for food and yard waste processing in the CMR that would create stability for organics generators and haulers all within a regulatory framework that supports the municipalities and facility neighbors in which these facilities operate.

The following are a summary of municipality experiences and identified opportunities from the report to ISC from the February 2020 meeting:

- Wheatland County has experienced issues with a composting site located in the county for over 10 years. Issues include public nuisance (odour, attracting wild life, refuse, inorganic matter spreading as a result of weather/wind) as a consequence of operation of the site below the industry's standard practice. Wheatland County developed a white paper outlining their concerns related to the regulatory framework under which the composting facilities operate.
- Wheatland County's concern regarding the operation of composting facilities relates to the input and output balance, and stockpiling of poorly processed materials. Composting facilities do not require a development permit – the municipal development permit processes shall be required prior to operate compost facilities.
- The City of Calgary would like to see increased capacity for food and yard waste processing in the Calgary region that will create stability for the generators and haulers all within a regulatory framework that supports the municipalities in which these facilities operate and the facility neighbors. The Calgary believes there is opportunity for increased business development and innovation to meet the regional processing needs for food and yard waste.
- The City of Calgary Composting Facility accepts residential green cart food and yard waste collected by The City of Calgary Waste & Recycling Services as well as dewatered biosolids, a nutrient-rich by-product of the wastewater treatment process.
- Calgarian's have enthusiastically embraced the Green Cart program; as a result, the facility is operating over-capacity. City of Calgary is exploring expansion options sooner than anticipated.
- In Rocky View County (RVC), no major organics processing facilities currently operate within RVC boundaries. RVC is concerned that poor performance by some operators has tainted the composting industry making it harder to site and approve new facilities locally. Materials collected in the RVC green cart organics program (from ~1,750 homes) are shipped to sites in Calgary for consolidation and transfer to compost facilities elsewhere in the province for processing. No local facilities exist in RVC to run truly efficient food waste organics programs.
- RVC also experiences the lack of geographically close, suitable, reliable processing capacity which hinders the County from expanding organics collection programs and impacts the ICI organic waste generators in the municipality. Similar to food waste organics, options for biosolids (wastewater treatment bi-products) processing and

treatment in the region are extremely limited causing risks to the sustainability of those programs

- Foothills County and the Foothills Regional Services Commission (FRSC) has developed a recent Regional Waste Management Plan. The plan indicates that a compost facility is needed to serve growing demand for compost processing. FRSC's board is likely to move forward with associated next steps and studies for a future composting facility in Foothills County.

At a meeting of the Land Use and Intermunicipal Servicing Committee in February 2020, the following motions were passed:

- a. Administration recommends that the regulatory complications experienced by Wheatland County be referred to the Advocacy Committee for consideration in supporting modifications to the Government of Alberta regulation in line with those identified by Wheatland County's white paper entitled *Alberta Composting Framework*, attached.
- b. Administration recommends that municipalities in the CMR prepare for a request by Foothills County staff in 2020 for projected compost volumes for a siting and design study for a potential future composting facility in the CMR.

At this time, the draft code of practice has not been reviewed to determine if the issues outlined by Wheatland County, and others, have been resolved in the draft Code of Practice.

Recommendation

Many municipalities have specific concerns related to composting facilities and the current regulatory framework. An update to the Code of Practice for Composting Facilities represents a timely opportunity for these concerns to be addressed. If of interest, CMRB Administration could support the coordination of CMR municipalities to provide comment on the forthcoming updated draft on behalf of the CMR.

That the Advocacy Committee direct CMRB Administration to work with interested member municipality administrations regarding common comments on the updated Code of Practice for Composting Facilities, once released, and report back to the Board.

I. Executive Summary

A. Issue

Composting has potential to aid plant growth, to stabilize and fertilize soils, and to divert waste streams otherwise intended for landfill. Alberta's environmental legislation regulating composting facilities is addressed to, among other things, minimizing the generation of odours.¹ Alberta Environment and Parks ("AEP") regulates all composting facilities other than on-farm facilities that compost only livestock manures.² The purposes of municipalities include, without limitation, to provide conditions that are, in the opinion of council, necessary or desirable for all or a part of the municipality, and to foster the well-being of the environment.³ Because of the Legislature's broad municipal law enforcement provisions in the *Municipal Government Act* [*MGA*] and bylaws enacted pursuant to it, there is inevitable overlap between the regulatory mandates of AEP and of municipalities, despite the fact that neither attempts to encroach on the jurisdiction of the other.⁴

Recent disputes have arisen in the Province that certain composting facilities within the regulatory mandate of AEP failed to minimize odours,⁵ which led to widespread public complaints. In the case of some complaints, municipalities exercised public powers granted to them under the *MGA* to enforce compliance with provincial municipal laws. This was done where AEP appeared not to enforce compliance with provincial environmental laws. No criticism is made of AEP in this report, and it is acknowledged that AEP has the authority to interpret and enforce compliance with environmental law in its discretion. Nevertheless, an apparent lack of enforcement action by AEP was concurrent with municipalities issuing administrative orders within their mandate to prevent and remedy nuisance conditions, and to prevent unauthorized land use or intensified land use.⁶ In these cases, municipal administrative orders resulted in related administrative appeals⁷ and reviews,⁸ and legal proceedings extant in the Court of Queen's Bench of Alberta⁹ and the Alberta Court of Appeal.¹⁰

In the case of the GFL Environmental Inc. ("GFL") compost facility in Wheatland County, public complaints dominantly concerned the operator's failure to minimize odours, but also concerned litter or drift materials (including asbestos) landing in fields surrounding the facility.¹¹ Particularly foul odours were testified to arise from a leachate pond and materials on site that did not compost and became an anaerobic "legacy pile" that emitted foul odours whenever its soil is disturbed.¹² In 2019, public complaints against GFL's operation of its compost facility did not lead to enforcement action by AEP,

¹ *Waste Control Regulation*, Alta. Reg. 192/1996, s. 38 [*Waste Control Regulation*].

² Agricultural composting facilities are on-farm facilities that compost only livestock manures. These are regulated through Alberta Agriculture and Forestry or the Natural Resources Conservation Board.

³ *Municipal Government Act*, R.S.A. 2000, c. M-26, s. 3 [*MGA*].

⁴ Wheatland County Subdivision and Development Appeal Board Orders No. SDAB S0209-01 and S0219-02 issued on November 8, 2019 at paras. 115-121.

⁵ See e.g.: Class I compost facility at the [Thorlakson Feedyards](#) operation situated in Rocky View County; and Class I compost facility at the GFL Environmental Inc. ("GFL") operation situated in Wheatland County.

⁶ See e.g.: Wheatland County Stop Orders issued to GFL on July 3 and July 5, 2019; Wheatland County Remedial Orders issued to GFL on July 3 and July 5, 2019; Wheatland County Notice of Variation of Remedial Order issued November 23, 2019.

⁷ See e.g.: Wheatland County Subdivision and Development Appeal Board Orders No. SDAB S0209-01 and S0219-02 issued on November 8, 2019.

⁸ See e.g.: Wheatland County review decision GFL Remedial Order [Appeal Decision](#) issued September 3, 2019.

⁹ See e.g.: Court of Queen's Bench of Alberta Action Nos. 1901-09980 and 1901-13026.

¹⁰ See e.g.: Alberta Court of Appeal No. 1901-0395AC, being an application by GFL filed December 9, 2019 for permission to appeal from to Wheatland County Subdivision and Development Appeal Board Orders No. SDAB S0209-01 and S0219-02 issued on November 8, 2019.

¹¹ Wheatland County Subdivision and Development Appeal Board Orders No. SDAB S0209-01 and S0219-02 issued on November 8, 2019, at para. 24.

¹² *Ibid*, at para. 58.

but did lead to enforcement action by Wheatland County, which issued remedial orders and stop orders under the County's bylaws enacted pursuant to the *MGA*. GFL commenced multiple legal proceedings against the County alleging, among other things, that only AEP could exercise public powers concerning GFL's operation of its compost facility. These submissions by GFL raise the question whether there is a gap in the regulatory mandate of AEP in the sense that AEP is unable to enforce compliance with environmental law in circumstances where municipalities are able to enforce compliance with municipal law. In turn, this raises the question whether such perceived gap should be remedied by giving legal force to long-proposed environmental law amendments that were proposed to apply to compost facilities as early as 2007.¹³

Public complaints concerning odours emitted from compost facilities have been increasing since 1996, when Alberta began regulating facilities and the Canadian Council of Ministers of the Environment ("**CCME**") first developed CCME Compost Quality Guidelines. This trend of increasing public complaints is likely to continue if no action is taken to fill a perceived gap in Alberta's regulatory framework and to empower AEP to enforce compliance with express legal requirements that are currently, at best, only implied.

The Government of Alberta is committed to prevent, control, and eliminate the emission of offensive odours¹⁴ within its mandate to promote the protection, enhancement and wise use of the environment.¹⁵ This report informs about the issues raised by the intersection or overlap of Alberta's environmental and municipal laws as they concern compost facilities. This report proposes to resolve or avoid any perceived gap in AEP's regulatory mandate by (1) enacting AEP's proposed "Standards for Composting Facilities in Alberta" ("**Standards**") first proposed in 2007, and (2) enacting further provisions that:

- local nuisance laws are applicable to compost facilities;
- a facility's annual report shall report all feedstock accepted at the facility in a manner that lists in detail any substances that would be potentially harmful to human health (e.g., asbestos), regardless of feedstock origin or the amount of potentially harmful substance;
- feedstock accepted at a compost facility must be initially processed quickly and completely processed into finished compost within a reasonable period of time (less than one year);
- prohibit the existence of organic material in anaerobic state;
- any anaerobic conditions that arise must be appropriately corrected and such correction must be done with input from municipalities;
- registration holders must engage a neutral third party to investigate complaints of offensive odours if complaints persist but cannot be confirmed by the facility's personnel prohibit processing or including inorganic materials in compost;
- prohibit processing or the inclusion inorganic materials in compost other than for the purpose of soil stabilization; and
- mandate that operators comply with operations plans,

(altogether, the "**proposed Amendments**")

¹³ AEP, "Standards for Composting Facilities in Alberta" (July 2007) [**Standards**].

¹⁴ *Environmental Protection and Enhancement Act*, R.S.A. 2000, c. E-12, s. 116 [**EPEA**].

¹⁵ *EPEA*, s. 2.

The legal amendments proposed in this report would enable the Government of Alberta to more efficiently achieve the intent of the Legislature to prevent, control, and eliminate the emission of offensive odours from compost facilities.

B. Cost-benefit statement

Although it is difficult to quantify and monetize the full range of benefits attributable to the amendments proposed in this report, overall benefits would include:

- for Alberta, a reduction in the emission of offensive odours and a reduction in the social and economic cost arising from decreased use of lands subjected to offensive odours;
- for compost facility operators that act in accordance with industry standards, a reduction in the reputational harm occasioned by the *status quo*, where AEP appears to take little enforcement action against any operator, whether because of a perceived gap in regulatory mandate or otherwise. In other words, under the proposed Amendments, good actors would benefit from AEP enforcing compliance by bad actors;
- for compost facility operators, an increase in profitability and increase in number of compost facilities province wide. A reduction in the emission of offensive odours would have an attendant reduction in public complaints regarding non-compliant facilities. The proposed Amendments are expected to increase foreign and domestic investment in Alberta as a jurisdiction that accommodates profit-making waste management facilities;
- for consumers, a reduction in the cost of compost, arising from an increase in the number and capacity of compost facilities province wide;
- for private sector employees, an increase in employment is expected from an increase in the number and capacity of compost facilities province wide; and
- for municipalities, a reduction in the cost of legal proceedings arising from legal challenges brought by compost facility operators. Because operators more readily recognize the regulatory mandate of AEP to enforce compliance with environmental law, the proposed amendments would avoid the cost of legal challenges to municipal enforcement of nuisance and land use bylaws.

C. Business and consumer impacts

As there is no net cost associated with the proposed Amendments, there is no distribution of impacts on industry or consumers.

D. Performance measurement and evaluation plan

The evaluation of the proposed Amendments will be focused on (1) a reduction in the number and frequency of public complaints relating to the emission of offensive odours, and (2) an increase in profitability and increase in number of private sector compost facilities province wide.

II. The Business-as-usual (“BAU”) Scenario

The BAU Scenario is based on AEP’s environmental regulatory mandate in place as of December 10, 2019.

In the BAU Scenario, compost operations in Alberta are regulated pursuant to the *Environmental Protection and Enhancement Act* [**EPEA**] on the basis of thresholds for the acceptance of feedstock. The *EPEA Activities Designation Regulation* [**Activities Regulation**] governs different classes of compost facilities depending on the amount of waste accepted annually as feedstock.

A. **The Activities Regulation**

Section 2(a.1) of the *Activities Regulation* defines a “**Class I compost facility**” as:

...a waste management facility where waste, not including hazardous waste is decomposed through a controlled bio-oxidation process, including a thermophilic phase, that results in a stable humus-like material but does not include

- (i) a residential composter,
- (ii) a compost facility that receives only sludge as defined in the *Wastewater and Storm Drainage Regulation* (AR 119/93),
- (iii) a Class II compost facility, or
- (iv) a manure storage facility as defined in the *Agricultural Operation Practices Act*,

Class I compost facilities may accept any type of organic waste as feedstock that is not hazardous waste. This includes source separated organics (i.e. from curbside collection), food waste, biosolids, and agri-food processing waste.¹⁶

A “**Class II compost facility**” as set out in section 2(a.2) of the *Activities Regulation* means:

....a waste management facility where only vegetative matter or manure is decomposed through a controlled bio-oxidation process, including a thermophilic phase, that results in a stable humus-like material, but does not include

- (i) a residential composter, or
- (ii) a manure storage facility as defined in the *Agricultural Operation Practices Act*.

Class II facilities are only able to accept manure or vegetative matter such as leaf and yard waste, brush and wood waste. The majority of compost facility operations in Alberta are Class II facilities.¹⁷

Those activities listed in Schedule 1 of the *Activities Regulation* require an “**approval**” under *EPEA* while those activities set out in Schedule 2 of the *Activities Regulation* only require a “**registration**” under *EPEA*. The requirement of an approval engages a greater degree of oversight by AEP than does a registration, requires public consultation, and may put additional conditions on the facility operator

¹⁶ <https://www.alberta.ca/composting-facilities.aspx#toc-2>

¹⁷ <https://www.alberta.ca/composting-facilities.aspx#toc-2>

beyond any guidelines as set out in the Code of Practice or the Standards, which are discussed in detail below.

Under Schedule 1(l) of the *Activities Regulation*, an *EPEA* approval is required for “the construction, operation or reclamation of a Class I and Class II compost facility that accepts more than 20 000 tonnes of waste per year for composting”. Whereas only registration is required for “the construction, operation or reclamation of a Class I or Class II compost facility that accepts not more than 20 000 tonnes of waste per year for composting”.

B. The Waste Control Regulation

Pursuant to section 38 of the *Waste Control Regulation* under *EPEA*, dealing with standards for compost facilities it states as follows:

All compost facilities shall be constructed and operated so that

- (a) the generation of odours is minimized,
- (b) run-on and run-off water is controlled so that surface water and groundwater are not contaminated, and
- (c) animals and vectors of disease are controlled.

C. The Code of Practice

Section 24 of the *Waste Regulation* provides that a person responsible for a Class I or Class II Compost facility must ensure that a compost facility is sited, designed, constructed, operated and reclaimed to meet the requirements of the *Waste Regulation* as well as the standards and requirements set out in the Code of Practice for Compost Facilities (the “**Code of Practice**” or “**The Code**”).

The Code of Practice simply provides that an Operator must “develop, maintain and implement” an operating plan that addresses various matters that may arise at a Facility, such as feedstock acceptance procedures or an odour minimization plan. In this regard while the Code of Practice does outline minimum standards, it offers little in terms of mechanisms for enforcement.

It is noteworthy that the Code, as currently drafted is only in reference to Class I Compost Facilities, however in practice its application has been to both Class I and Class II facilities that require a registration.

Typically compost facility registrations are a single page document issued to facility operators that merely incorporate the Code by reference without any further condition.

D. The “Standards for Composting Facilities in Alberta”

In 2007, AEP published the Standards for Composting Facilities (the “**Standards**”) in anticipation of updating relevant regulations that pertain to compost facilities. To date, however, the regulations have not yet been updated and therefore, unlike the Code, the Standards are not specifically incorporated into the regulatory framework for the operation of compost facilities and do not have the force of law.

Notwithstanding that legal incorporation of the Standards remains in limbo Alberta Environment’s position has been to informally incorporate Standards in the regulation of composting in Alberta.

As noted above, New Class I and II Compost facilities that are subject only to registration are required to follow requirements set out in the Code of Practice, however all compost facilities are encouraged to show due diligence by following the more stringent requirements set out in the Standards.¹⁸

The Standards outline the minimum requirement for development, operation, monitoring closure and reclamation of composting facilities regulated (i.e. those Class I and Class II¹⁹ compost facilities that accept more than 20,000 tonnes of waste per year and are subject to an approval) by AEP. They are intended to provide public assurance in respect of the protection of groundwater and surface water as well as the management of potential nuisances that are often associated with composting facilities.²⁰ Until updates to the current regulatory framework are legislated, the Standards only apply to new composting facilities accepting greater than 20,000 tonnes of waste per year or lateral expansions of existing facilities that similarly surpass the 20,000 tonnes of waste per year threshold.²¹

The Standards set out more detailed and specific requirements that address issues that are often of concern for communities that surround compost facilities. The Standards address issues such as the development of an operations plan, an odour management program, how odour complaints are to be dealt with, protocol for dealing with offensive odours, facility capacity, and nuisance management. Furthermore, the Standards also outline more detailed environmental monitoring requirements.

E. The Regulation of Nuisance Connected to Compost Facilities

Finally, the *Agricultural Operation Practices Act* [AOPA]²² has some bearing on the regulation of compost facilities and specifically the handling of nuisance claims that may arise from such operations in so far as the operation meets the definition of an “agricultural operation”.

Pursuant to the AOPA an “agricultural operation” means “an agricultural activity conducted on agricultural land for gain or reward or in the hope of expectation of gain or reward, and includes....[inter alia] the collection transportation, storage, application, use, transfer and disposal of manure, composting materials²³ and compost²⁴”.

Section 2 of the AOPA, which deals with nuisance, provides special protections under the law and restricts the liability of agricultural operations. It states:

2(1) A person who carried on an agricultural operation and who, in respect of that operation, does not contravene

(a) the land use bylaw of the municipality or Metis settlement in which the agricultural operation is carried on

(b) the regulation or approval, registration or authorization

¹⁸<https://www.alberta.ca/composting-facilities.aspx#toc-2>

¹⁹ The Standards also set out guidelines in respect of Class III compost facilities (i.e. facilities that accept 100 to 500 tonnes of leaf and yard waste a year, however discussion of Class III facilities is beyond the scope of this White Paper.

²⁰ <https://www.alberta.ca/composting-facilities.aspx#toc-2>

²¹ Standards page ii

²² *Agricultural Operation Practices Act*, R.S.A. 2000, c. A-7 [AOPA].

²³ “Composting materials” is defined in AOPA as “organic material generated by an agricultural operation described in clause (b) (ii), (iv), (v) or (vi), other than carcasses or parts of carcasses, and includes other substances permitted by the regulations;

²⁴ “Compost” is defined in AOPA as “solid mature product resulting from composting but does not include compost to which the *Fertilizers Act* (Canada) applies”

(c) the generally accepted agricultural practice

is not liable to any person in an action in nuisance resulting from the agricultural operation and is not to be prevented by injunction or other order of a court from carrying on the agricultural operation because it causes or creates a nuisance.

(1.1.) If section (1)(a) is contravened but the contravention is authorized by an approval, authorization or registration; the approval, authorization or registration prevails over the land use by law with which it conflicts.

(2) Subsection (1) continues to apply notwithstanding that one or the following more of the following occur:

(a) the land use bylaw of the municipality or Metis settlement in which the agricultural operation is carried on changes;

(b) the ownership of the agricultural land on which the agricultural operation is carried on changes;

(c) the agricultural operation is carried on by other persons;

(d) the land use adjacent to the land on which the agricultural operation is carried on changes

(3) Where a plaintiff or claimant in a proceeding against a person who carried on an agricultural operation, or

(a) claims damages in nuisance resulting from the agricultural operation, or

(b) applies for an injunction or other order of a court preventing or restricting the carrying on of the agricultural operation because it causes or creates a nuisance.

The onus of proving that the defendant contravened the land use bylaw, regulation, approval, registration, authorization or practice referred to in subsection (1) is on the plaintiff or claimant, as the case may be.

(4) In an action in nuisance against a person who carried on an agricultural operation, a court may

(a) order the party that commences the action to furnish security for costs in any amount the court considers proper;

(b) award costs in the action.

The implication of the *AOPA* is that it makes it very challenging to seek recourse against the registration holder for a compost facility for nuisance such as odour, provided that the operation of the compost facility meets the definition of "agricultural operation". It is noteworthy that the definition in *AOPA* does not specifically contemplate the processing or manufacture of compost, but it may be open to some commercial compost manufacturers situated on agricultural land to argue their operations may fall within the meaning of "use" of compost or the collection, transportation, storage, transfer and disposal of composting materials or compost.

The nuisance provision of the *AOPA* also has implications for the ability for AEP to regulate nuisance odours that may arise from a compost facility. Specifically, section 116 of *EPEA* provides as follows:

116(1) Where the Director is of the opinion that a substance or thing is causing or has caused an offensive odour, the Director may issue an environmental protection order to the person responsible for the substance or thing.

(2) Subsection (1) does not apply in respect of an offensive odour that results from an agricultural operation that is carried out in accordance with generally accepted practices for such an operation on in respect of which recommendations under Part 1 of the Agricultural Operation Practices Act indicate that the agricultural operation follows a generally accepted agricultural practice.

As such, where a compost facility is on agricultural land and falls under the definition of “agricultural operation” in connection with the activities that may be the source of odour, the recourse available to AEP is quite limited. In effect AEP would need to demonstrate that the practices of the compost operator are not generally accepted by following the process of such an assessment which is detailed in the AOPA.

III. The Need for Proposed Amendments (the “Regulatory Scenario”)

The BAU Scenario has resulted in municipalities enforcing municipal laws against compost facility operators that fail to minimize offensive odours. In these cases, operators may have failed to implement or update operations plans in accordance with the requirements of the Code of Practice. However, AEP has not appeared in these cases to enforce compliance with the requirement of environmental law to minimize offensive odours. The BAU Scenario has thus given rise to a perceived gap in AEP’s regulatory mandate.

As described in this section, the BAU Scenario suffers from several inadequacies which would and should be addressed by the proposed Amendments in the Regulatory Scenario (section IV, below).

A. The BAU Scenario does not express how long waste can be stored or prohibit anaerobic processing conditions

Class 1 compost facilities are governed by the Code of Practice and the *Waste Control Regulation*. As noted above, the Code simply provides that a registration holder must “develop, maintain and implement” an operating plan that addresses various matters that may arise at a compost facility, such as feedstock acceptance procedures or an odour minimization plan. Neither the Code nor any other binding legislation or policy document set out appropriate standards for such matters. As a result, Operators are able to set their own practices and procedures with little regulatory oversight.

While the Standards (which have not been incorporated into law and are therefore not binding on registration holders) provide a more granular description of the proper plans and specifications that ought to be in place at a Facility, they do not address specific procedures or strategies that should be employed in order to reduce the release of pathogens or offensive odours. Rather, the Standards contemplate that these procedures should be designed and implemented, but each registration holder may do so in a manner that it sees fit.

This has been particularly problematic for Wheatland County and GFL due to the improper storage of feedstock at the GFL’s facility that resulted in the Legacy Piles. Neither the Code nor the Standards set out acceptable timelines for the storage of feedstock upon acceptance, nor do either address the appropriate procedures to be followed to remove or mitigate an odour source, such as the Legacy Piles, once it exists. These procedures are determined by the registration holder, and no input from the local municipality is required. Naturally, it is necessary that feedstock be stored at a compost facility for some period of time; however, the Code does not set a timeline for the processing and removal of feedstock

and other organic materials. As a result, a registration holder may permit large piles of old organic material, such as the Legacy Piles, to build up without contravening the Code.

Further, neither the Code nor the Standards contemplate how a registration holder should address problems related to offensive odours once they arise. The Code requires that registration holders develop a plan for the management, detection and mitigation of offensive odours; however, little additional guidance is provided for appropriate standards and responses when offensive odours occur. Rather, the registration holder may determine its own odour management program and odour contingency response plan; however, as discussed further below, these programs and plans may impose few obligations on the registration holder, resulting in ineffective mitigation of offensive odours.

The BAU Scenario has led to the accumulation of waste at a compost facility that has endured for years and which a registered holder stored under anaerobic conditions. Thus the BAU Scenario has led to a failure of compost facility operators to minimize offensive odours. This suggests the need for a Regulatory Scenario in which written laws:

- express that feedstock accepted at a compost facility must be initially processed quickly and completely processed into finished compost within a reasonable period of time (less than one year);
- prohibit processing any materials into compost under anaerobic conditions; and
- require that any anaerobic conditions that may arise be appropriately corrected (e.g., by use of negative-pressure enclosures, frequent aeration of materials, etc.).

B. Reporting is not adequate in the BAU Scenario

Source and content of feedstock

Registration holders must develop and maintain an annual report for the operations at the Facility that are included in the facility's operating record. The operating record is a document that is maintained by a registration holder that includes (a) a copy of the registration for the facility, (b) current versions of the design and operations plan for the facility, and (c) annual reports for the facility. Upon request, registration holders must provide the operating record to AEP.²⁵

The Code specifies that an operations plan must set out the "source and types of feedstock to be composted" at a Facility²⁶; however, because the operations plan sets out the *planned* operations and procedures for the subject facility, it does not report on the *actual* source of feedstock accepted at the subject facility. In other words, because the operations plan is a forward-looking document, it does not provide for a look-back at the activities that took place over the preceding year. Rather, this information is set out in a registration holder's annual report. The annual report must include information relating to the type and volume of feedstock received and processed in the calendar year; however, there is no requirement to report the source of any of the feedstock. The Standards, similarly, do not stipulate that a registration holder must, or even should, report the source of feedstock accepted at a facility each year. As a result, a registration holder may accept and process feedstock from sources other than those listed in the operation plan, without the knowledge of AEP or any other interested party. Further, the BAU Scenario does not require any operator to report the receipt of waste other than feedstock, at all.

²⁵ Code at s. 11(1) & (3)

²⁶ Code at s. 7(1)(a).

The BAU Scenario therefore allows for feedstock to be reported in a manner that does not list in any detail substances received that would be potentially harmful to human health, such as asbestos-containing drywall. This suggests the need for a Regulatory Scenario in which written laws express that all feedstock and other waste be reported in a manner that lists in detail any substances that would be potentially harmful to human health, regardless of feedstock origin or the amount of potentially harmful substance.

Reporting of complaints

Section 7(1)(e) of the Code provides that a operations plan must include a “plan for the management, detection and mitigation of offensive odours.” There is no requirement to report complaints relating to offensive odours being generated from a Facility, although the Standards (which are not binding) provide that a summary of complaints are to be provided in each facility’s annual report.²⁷

C. “Other applicable laws” are not expressed in the BAU Scenario

Municipal Laws

In addition to the obligations set out in the Code, registration holders must comply with all obligations set out under *EPEA*, the *Subdivision and Development Regulation* and all other applicable laws.²⁸ While this appears to create a broad set of obligations for registration holders, it is not expressed in the BAU Scenario which laws are applicable to the operation of compost facilities.

In particular with respect to nuisance, section 2 of *AOPA* provides that a person who carries on an agricultural operation, such as a composting at a compost facility, is not liable to any person in an action in nuisance resulting from the agricultural operation so long as the operations at the facility do not contravene (a) the municipality’s land use by-law, (b) the regulations or an approval, registration or authorization, or (c) the generally accepted agricultural practice.

The BAU Scenario is problematic because of the Code is silent with respect to accepted practices for most of the operations at a compost facility. As a result, it may be unclear under which circumstances a municipal nuisance bylaw would be applicable, and therefore, when a municipality is able to validly enforce its own bylaws.

In any event, registration holders have argued in legal proceedings that municipalities cannot enforce “other applicable law” in respect of compost facility where such would, in the view of registration holders, intrude upon a regulatory mandate reserved for AEP.²⁹ The BAU Scenario has thus led to a multiplicity of legal proceedings challenging the regulatory mandates of other branches of government simply because they exercise public law powers other than those of AEP.

The BAU Scenario includes clear authority for municipalities to regulate land use, including use to operate compost facilities. Among other things, municipalities may require that existing or proposed compost facilities be approved by means of development permits issued pursuant to land use bylaws. Development permits may approve facilities with conditions governing the acts or omissions of operators, all aimed at averting the nuisance conditions that have in the past harmed the reputation of industry operators.

The BAU Scenario does not expressly provide that municipalities also have authority under provincial law to regulate nuisance conditions. The BAU Scenario’s failure to expressly provide that operators

²⁷ Standards at s. 6.5(c)(xi).

²⁸ Code at s. 1(1).

²⁹ Court of Queen’s Bench of Alberta Action Nos. 1901-09980 and 1901-13026.

must comply with municipal nuisance bylaws incentivize municipalities to impose the requirement of development permits. Where municipalities must resort to land use regulation, a regulatory burden inevitably arises that would be avoided by the proposed Amendments in the Regulatory Scenario set out below.

The BAU scenario has resulted in municipal enforcement action being taken in the perceived absence of environmental enforcement action by AEP. The optics that compost facility operators are subject to regulation by more than one regulator raises the question whether the BAU Scenario imposes too great a regulatory burden which may deter investment in Alberta's waste management sector. The proposed Amendments in the Regulatory Scenario reported below would provide AEP a lead regulatory mandate to avoid nuisance conditions that have resulted in enforcement action by municipalities in 2019. Optically, the Regulatory Scenario should appropriately be perceived as a lesser regulatory burden than the BAU Scenario.

The BAU Scenario suggests that, without the proposed Amendments, further and expensive legal proceedings will likely be brought by operators to challenge administrative actions by municipalities to avoid nuisance conditions at or arising from compost facilities. The BAU Scenario is thus likely to lead all stakeholders, and primarily operators and municipalities, to incur greater legal expense required to advance legal proceedings to hear and judgment in Alberta Courts to resolve disputes arising regarding facility conditions. This BAU Scenario thus includes an economic burden that is expected to be lessened or avoided altogether under the Regulatory Scenario reported below.

The foregoing suggests the need for a Regulatory Scenario in which written laws express that municipal nuisance bylaws are applicable to compost facilities, and that AEP has express authority to regulate nuisance conditions arising at facilities that would otherwise give rise to enforcement action by municipalities.

D. Inorganic waste permitted in the BAU Scenario can fail to minimize odours

The Code permits registration holders to accept up to 20,000 tonnes of waste per year at a Class 1 compost facility. "Waste" is defined in the *Waste Control Regulation* as

any solid or liquid material or product or combination of them that is intended to be treated or disposed of or that is intended to be stored and then treated or disposed of, but does not include recyclables.³⁰

In contrast, "feedstock" is defined in the Code as "waste that contains organic materials which decompose biologically".³¹ Feedstock is therefore a subset of waste.

In the BAU Scenario, registration holders appear to have accepted inorganic waste (i.e. waste that is not feedstock) at a compost facility, and ostensibly remain compliant with the Code. Inorganic materials, including sulphur-containing compounds, have been observed to emit offensive odours.³² Some forms of waste, however, are subject to regulation by other regulators. For example, the addition of sulphur to feedstock results in the production of fertilizer rather than compost, since compost is defined as "a stable humus-like materials that (i) results from the biological decomposition and stabilization of organic materials under aerobic and thermophilic conditions...". Since sulphur is not an organic material, it cannot

³⁰ *Waste Control Regulation* at s. 1(II).

³¹ Code at s. 3(f).

³² Daryl McCartney, P.Eng. "GFL Composting Facility Assessment" prepared for Wheatland County (June 2018) at 15, s. 5(d).

become compost; rather, the product derived from mixing compost with sulphur is a fertilizer³³ and is regulated federally by the Canadian Food Inspection Agency.

It is not clear how AEP interprets its regulatory mandate where inorganic waste is processed together with organic waste at compost facilities that fail to minimize offensive odours. It is also not clear how AEP interprets its regulatory mandate when operators of compost facilities appear to violate applicable laws other than the plain wording of the Code of Practice.

The BAU Scenario has thus led to operators accepting waste at compost facilities other than feedstock, namely organic waste. Such operators have in fact acted outside the scope of the activities contemplated by the registration issued by AEP. This suggests the need for a Regulatory Scenario in which written laws prohibit processing or the inclusion inorganic materials in compost other than for the purpose of soil stabilization, subject to other legal authority to do so.

E. Enforcement problems:

Responding to complaints

The skeletal legislative framework for composting in Alberta results in composting practices being relatively self-regulated. The hazards of this approach are evident in GFL's 2018 operating plan in which GFL set less exacting standards for itself in respect of mitigating offensive odours. GFL's 2018 operating plan provides that "in order to minimize impacts from objectionable odours, the following operating procedures should be to be [sic] adhered to..." (underline added). The structure of this provision suggests that GFL should, but does not have to, adhere to the procedures set out in the operating plan. This contrasts with other portions of GFL's operating plan, such as the sections relating to compost pad maintenance, which provides that "regular maintenance will include..." (underline added).

Exacerbating this issue, neither the *Waste Control Regulation* nor the Code set out a consequence or penalty if a registration holder fails to adhere to its own operating plan. As a result, registration holders face few consequences in the event of such failure. Further, and specifically in GFL's case, it's likely that its failure to adhere to the procedures set out in its operating plan for odour mitigation would not even constitute a contravention of the operating plan, since those provisions are permissive, but not obligatory.

With respect to odour management, the Code provides that a registration holder must have an odour management program, and the Standards state that it must include a method to detect odours and that a registration holder shall investigate any odour complaints it receives. GFL's 2018 operating plan provides that site personnel should conduct perimeter inspections of its facility for odours, and in practice, GFL's site personnel have responded to investigate odour complaints from local residents. The draw-back of this approach, however, is that site personnel may be poorly equipped to detect offensive odours as a result of being "nose-blind" to offensive odours because of frequent exposure to such odours over the course of working at the facility. Further, odours that are offensive but not harmful are difficult to measure objectively, and as a result, subjective observations must be relied upon. If facility personnel are less able to subjectively detect offensive odours emanating from a compost facility, the effectiveness of any response plan that relies on their observations will be mitigated.

An example of this problem arose on July 11, 2019, when members of Wheatland County's administration attended GFL's facility to conduct an inspection. Two of Wheatland County's officers

³³ "fertilizer" is defined in the *Fertilizer Act*, RSC 1985, c F-10 as "any substance or mixture of substances, containing nitrogen, phosphorus, potassium or other plant food, manufactured, sold or represented for use as a plant nutrient".

stated that they experienced nausea and headaches due to the offensive odours at the facility. Conversely, an employee from the Facility stated that no offensive odours existed at all at the time.

As a result, it is possible that site personnel would not be able to confirm the presence of any offensive odour giving rise to a complaint from a local resident, because they are unable to detect such odours in many cases. If site personnel fail to detect or identify offensive odours, the registration holder will be unlikely to implement effective mitigation of the odours, since, from the registration holder's perspective, no offensive odours are being generated by the facility. For Wheatland County residents, this has led to great frustration, and as a result residents stopped reporting the offensive odours to GFL since no actions were being taken to address the problem. As a result, GFL recorded in its annual report that it received no complaints relating to offensive odours in previous year.

Offensive odours at compost facilities are often generated by organic material that has been improperly processed and has entered an anaerobic state. Although the *Waste Control Regulations* provide that compost facilities must be operated so that the generation of odours is minimized,³⁴ there is no express provision under the Code requiring that aerobic conditions be maintained at a compost facility. Organic materials that have progressed towards an anaerobic state fall into a legislative gap, since their existence is not expressly prohibited under the Code or the *Waste Control Regulation*. Consequently, when such conditions materialize, AEP must rely on laws of general application, rather than an express provision of the Code, to enforce remedial steps, failing which, affected municipalities must commence separate proceedings pursuant to their authority granted under MGA in order to advance the public interest.

As discussed in the legislative framework section above, the ability of AEP to issue environmental protection orders (“**EPOs**”) in respect of odours as contemplated by section 116 of *EPEA* is curtailed by the application of the AOPA. Because the precise source of odours can be difficult to detect, compost facility operators that operate on agricultural land may argue that the smells generated by the compost facility relate to the collection, transportation, storage, application, use, transfer and disposal of manure, composting materials or compost, each which fall within AOPA's definition of an agricultural operation. Once captured by the carve-out provided for under AOPA, AEP is prevented from issuing an EPO unless it can demonstrate that the activities causing the offensive odours do not arise from a generally accepted agricultural practice and would require AEP to follow the review process outlined in AOPA.

While it is notable that processing waste into compost is not expressed in AOPA's definition of “agricultural operation”, the definition of the latter is sufficiently broad to provide non-compliant operators an arguable case that AOPA precludes the enforcement action sought to be taken. This may contribute to a “regulatory chill” or reluctance by AEP to issue EPOs regarding odours emanating from compost facilities.

The BAU Scenario has thus led to an inadequate legal framework to enforce compliance with the goals of the Code, given its skeletal structure. This suggests the need for a Regulatory Scenario in which written laws express that registration holders must engage a neutral third party to investigate complaints of offensive odours if complaints persist but cannot be confirmed by the facility's personnel. This also suggests the need for a Regulatory Scenario that allows AEP to issue remedial orders or penalties to registration holders for failing to adhere to its own operating plan.

³⁴ *Waste Control Regulation* at para 38(a).

IV. The Regulatory Scenario: Proposed Amendments

The shortcomings of the BAU Scenario reported above suggest the need for a Regulatory Scenario to amend Alberta's legislation governing the operation of compost facilities in the Province.

A. Enact the Standards into law

Enacting the Standards into law will enhance regulatory certainty for all stakeholders, from registration holders, to the public, to municipalities, with respect to the obligations of registration holders when operating compost facilities. The Standards address in part the shortcomings of the Code by expressing with greater clarity the minimum requirements for development, operation, monitoring, and closure of compost facilities.

Enacting the Standards is also consistent with assuring the public assurance that groundwater and surface water will be protected at all stages of the compost facility life cycle.

Finally, enacting the Standards is also consistent with attempting to avoid nuisances and unauthorized land use and intensification of land use, that would otherwise contravene municipal laws and lead to enforcement thereof.

However, enacting the Standards would not alone address all shortcomings of the BAU Scenario reported above that resulted in the failure to minimize offensive odours in compost facilities.

B. Enact further provisions into law

The fact that the Standards would not avoid all reported failures of the BAU Scenario suggests the need for a Regulatory Scenario to enact the Standards together with the following provisions:

1. An express provision that local nuisance laws are applicable to compost facilities. The Code and the Standards each provide that registration holders must comply with other applicable laws. However, since compost facilities fall under the jurisdiction of the Province, some operators have submitted in legal proceedings that it is unclear at what point other laws, such as nuisance bylaws, become applicable.³⁵ By expressly providing that nuisance bylaws apply to composting facilities, amended legislation can enhance regulatory certainty and reduce legal expense for all stakeholders arising from unnecessary legal challenges to actions by municipalities. Increasing regulatory certainty is a clear and present objective of the Government of Alberta.
2. A facility's annual report shall report all feedstock accepted at the facility in a manner that lists in detail any substances that would be potentially harmful to human health (e.g., asbestos), regardless of feedstock origin or the amount of potentially harmful substance. The BAU Scenario's reporting obligations do not require a registration holder to report the source of feedstock or any specific hazardous substance that may be contained therein. This amendment will ensure that local communities are not at risk of exposure to hazardous substances that are included in feedstock or amendments accepted at a compost facility, and currently may be unreported.
3. Feedstock accepted at a compost facility must be initially processed quickly and completely processed into finished compost within a reasonable period of time. This amendment will protect against the accumulation of anaerobic organic material at a compost facility, and thereby reduce the risk of offensive odours being generated from composting operations. It will also mitigate the

³⁵ Court of Queen's Bench of Alberta Action Nos. 1901-09980 and 1901-13026; Wheatland County Subdivision and Development Appeal Board Orders No. SDAB S0209-01 and S0219-02 issued on November 8, 2019.

risk that a compost facility is informally used as a landfill for organic waste by mandating the production of finished compost within a reasonable period of time.

4. An express prohibition on the existence of organic material in anaerobic state. Organic material that has progressed toward an anaerobic state is frequently a source of offensive odours at compost facilities. By prohibiting the existence of anaerobic material, AEP will be able to issue penalties and mandate the treatment or removal of sources of offensive odours without resort to EPOs. AEP's regulatory mandate would result in facilities that minimize offensive odours and avoid stakeholder opposition to new or existing facilities. This is expected to increase the profitability and number of facilities province-wide. This is further expected to increase investment in Alberta as a jurisdiction that accommodates profit-making waste management facilities.
5. Any anaerobic conditions that arise must be appropriately corrected (e.g., by use of negative-pressure enclosures, frequent aeration of materials, removal of anaerobic material to a landfill, etc.), and such correction must be done with input from municipalities. As discussed, organic materials create offensive odours when they exist under anaerobic conditions. Offensive odours are released when anaerobic soils are disturbed. As a result, treatment or removal of anaerobic soils have potential to create nuisance conditions for nearby land users. Any treatment or removal of anaerobic materials should be conducted in consultation with municipalities whose residents stand to be adversely impacted by such treatment or removal.
6. Registration holders must engage a neutral third party to investigate complaints of offensive odours if complaints persist but cannot be confirmed by the facility's personnel. Since personnel at a compost facility may be unable or less able to identify offensive odours generated from the compost facility, it may be necessary to employ a neutral third party to investigate complaints. This approach achieves a reasonable balance between responding to complaints from local residents and ensuring that complaints regarding offensive odours are attributed to the appropriate source.
7. An express prohibition against processing or including inorganic materials in compost other than for the purpose of soil stabilization. Composting is, by definition, the decomposition of organic materials. If a registration holder augments its finished compost through the addition of other inorganic materials, such as sulphur, the registration holder is no longer making compost. Rather, it is manufacturing a fertilizer, which is an activity that falls under federal jurisdiction. Unless a registration holder can demonstrate that it has received the appropriate approvals for such activities from the relevant federal authorities, the registration holder should be suspended from operating its compost facility for failing to comply with other applicable laws, as required under section 1(1) of the Code. Although this requirement is currently implied, and express prohibition on the inclusion of inorganic materials in compost would provide additional regulatory certainty for compost facility operators.

C. Enforcement of Code and Standards

Currently, a registration holder's regulatory obligations are largely set out in its operating plan; however, neither the Waste Control Regulation nor the Code expressly provide for any consequence for failing to adhere to one's own operating plan. Section 116 of EPEA provides AEP with the authority to issue an EPO if a compost facility is found to be generating an offensive odour; however, it does not provide AEP with the authority to issue an EPO if a registration holder otherwise fails to adhere to its operating plan. While AEP should be given broad discretion in setting appropriate penalties for any such failures, an express provision in the Code or the Waste Control Regulation permitting AEP to issue remedial orders or penalties to registration holders for failing to adhere to its own operating plan would bridge a

substantial enforcement gap that currently exists in the legislation governing the operation of composting facilities in Alberta.

V. Conclusions:

An examination of the BAU Scenario that is currently in place in Alberta for the regulation of compost facilities demonstrates an arguable regulatory gap that may account for recent disputes between compost facility operators and the municipalities that have occasioned the economic burden of legal proceedings which may be avoided by the proposed Amendments of the Regulatory Scenario. In particular, the BAU Scenario includes the following burdens:

- it fails to address the storage of waste or annual throughput capacity (as opposed to acceptance capacity) leading to the accumulation of waste that may become anaerobic causing odours and other nuisances;
- it fails to impose adequate reporting requirements on the actual source of feedstock, as operations plans required by the Code currently require only prospective reporting;
- it has no mandatory reporting requirements with respect to complaints associated with compost facility operations;
- it fails to express all circumstances under which municipalities may enforce municipal law in connection with nuisance conditions and land use associated with compost facilities;
- it led to some compost facility operators accepting inorganic waste (i.e. waste that is not feedstock, and therefore not a part of composting), notwithstanding that the Code does not contemplate the acceptance of inorganic waste. Further, inorganic waste has been shown to be a primary contributor to offensive odors at compost facilities;
- it is a largely self-regulated approach by compost facility operators that has lacked accountability and which does not include sufficient punitive action or other sanction to incentivize operators to adhere to their own operations plans. Further, the BAU Scenario has been unable to avoid disputes from arising between operators and other stakeholders, including municipalities. It has further failed to resolve disputes outside of legal proceedings before courts and tribunals.
- it has failed to avoid nuisance conditions at compost facilities, such as offensive odors; and
- the authority of AEP to issue EPOs under *EPEA* in connection with odor problems may have been curtailed or subject to “regulatory chill” by the operation of *AOPA*. This has allowed compost facility operators to avoid responsibility for nuisance odors. This has also allowed legal uncertainty to persist whether a given compost facility may constitute an “agricultural operation” in context of whether an offensive odor constitutes a nuisance.

The BAU Scenario is thus a regulatory framework that has not efficiently given effect to the Legislature’s intent to prevent, control, and eliminate the emission of offensive odors from compost facilities,³⁶ within the Government of Alberta’s mandate to promote the protection, enhancement and wise use of the environment.³⁷

³⁶ *EPEA*, s. 116.

³⁷ *EPEA*, s. 2.

The proposed Amendments of the Regulatory Scenario would address the shortcomings of the regulatory scheme under the BAU Scenario. In particular, the Regulatory Scenario would enact the Standards into law and enact new provisions that:

1. expressly provide that local nuisance laws are applicable to compost facilities;
2. require reporting of the actual contents of all feedstock accepted at compost facilities that transparently allows for understanding of potential implications for human health and the environment;
3. legislate reasonable timelines for how long waste feedstock can remain on site before it is processed to compost and removed;
4. expressly prohibit compost facility operators from allowing organic material that is in an anaerobic state to be on site and allows for AEP to issue penalties and mandate treatment or removal of sources of offensive odours without resort to EPOs;
5. legislate corrective actions, with input from local municipalities, to address anaerobic conditions;
6. require registration holders to engage third parties to investigate complaints of offensive odours if complaints persist but cannot be confirmed by compost facility personnel; and
7. expressly prohibit the processing or inclusion of inorganic material at compost facilities other than for the purpose of soil stabilization.

Absent meaningful regulatory reform such as that proposed in the Regulatory Scenario reported here, municipalities that face on-going problems with the operation of compost facilities will be incentivized to avoid nuisance conditions by resorting to municipal regulatory powers, such as issuing remedial orders or requiring development permits imposing strict conditions on any new or expanded compost facility operation. That result is proper and legal, but likely impose a greater regulatory burden under the BAU Scenario than under the proposed Amendments of the Regulatory Scenario. In the alternative, the shortcomings of the BAU Scenario will likely result in increased litigation of disputes by industry concerning the imposition of development permits. This economic burden would likely be avoided by the enhanced regulatory certainty provided by the Regulatory Scenario.

Code of Practice for Compost Facilities

Made under the *Environmental Protection and Enhancement Act*
and the Waste Control Regulation

(August 7, 2020)

Agenda Item 7ii Attachment

FOREWORD

The Code of Practice for Compost Facilities is incorporated in the Waste Control Regulation (AR 192/96), under the authority of the *Environmental Protection and Enhancement Act*. Persons responsible for Class I and II compost facilities accepting less than 20,000 tonnes feedstock per year must meet all requirements of the Code of Practice for Compost Facilities.

In addition to the requirements of this Code of Practice, the persons responsible must comply with all the provisions of the *Environmental Protection and Enhancement Act*, its associated regulations, the Subdivision and Development Regulation (AR 43/2002), and other applicable federal, provincial and municipal regulations and local bylaws.

Apart from protecting the environment, all compost facilities are subject to the requirements for protecting public health contained in the *Public Health Act* and its associated regulations, including the Nuisance and General Sanitation Regulation (AR 243/2003).

Persons responsible for compost facilities governed by this Code must register or notify Alberta Environment and Parks, in accordance with the *Activities Designation Regulation* (AR 276/2003) before commencing the construction, operation or reclamation of a compost facility.

Any comments or concerns regarding the application or contents of the Code should be made to:

Water and Waste Policy Branch
Alberta Environment and Parks
10th Floor Oxbridge Place
9820-106 Street
Edmonton, Alberta T5K 2J6

E-mail: AEP.WasteRegulation@gov.ab.ca

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DEFINITIONS

- 1 (1) All definitions in the *Environmental Protection and Enhancement Act* and associated regulations shall apply, except where expressly defined in this Code of Practice.
- (2) For the purpose of this Code of Practice,
- (a) “Act” means the *Environmental Protection and Enhancement Act*, R.S.A. 2000 c. E-12, as amended;
 - (b) “active composting area” means the area where windrows or piles of feedstock are placed for active composting;
 - (c) “aerobic conditions” means an environment which is conducive to the microbial degradation of organic solid waste in the presence of oxygen and has a pore space oxygen concentration of greater than 10 per cent;
 - (d) “amendment” means a supplemental material mixed with feedstock prior to or during active composting or curing to create a favorable condition for composting, either by adjusting the moisture content, or the carbon to nitrogen(C:N) ratio, pH, structure or free air space. Amendments do not include materials added to compost;
 - (e) “amendment storage area” means the area where amendments are stored;
 - (f) “animal” means a vertebrate, other than a human being or fish;
 - (g) “authorized design capacity” means the design capacity submitted by the person responsible for a Class I or Class II Compost Facility, and accepted by the Director as part of a registration application or notification;
 - (h) “background groundwater quality” means the groundwater quality prior to the start of composting operations;
 - (i) “bulking agent” means a material that is added to feedstock to enhance porosity and airflow;
 - (j) “CCME” means the Canadian Council of Ministers for the Environment;
 - (k) “certified operator” means a person who holds a certificate recognized by the Director;
 - (l) “Code of Practice” means the Code of Practice for Compost Facilities, as amended or replaced from time to time;
 - (m) “composite sample” means a sample that is collected by combining a number of discrete or sub-samples into one homogenized sample to represent the average concentration of the material for which the discrete or sub-samples were collected;
 - (n) “compost” means a solid stable and mature product resulting from composting of organic solid waste which has gone through the pathogen reduction process and meets all the following criteria set out in the Guidelines for Compost Quality, published by CCME, as amended, for:

- i. maximum concentration for trace elements;
 - ii. foreign matter;
 - iii. sharp foreign matter;
 - iv. pathogens; and
 - v. maturity/stability;
- (o) “composting” means a managed process of bio-oxidation of a solid heterogeneous organic substrate including a thermophilic phase;
- (p) “contaminant” means a substance that is present in an environmental medium in excess of natural background concentration;
- (q) “curing area” means the area where composting materials are placed to stabilize to reach maturity;
- (r) “day” means any period of 24 consecutive hours unless otherwise specified;
- (s) “dead animal” means animal carcass excluding hatchery waste and fish carcasses;
- (t) “design capacity” means the processing capacity of a compost facility in tonnes or cubic meters (wet weight) of feedstock accepted per year;
- (u) “feedstock” means:
 - i. organic solid waste that will readily decompose during composting process including all the organic materials listed in the *Acceptable Feedstock List for Compost Facilities*, published by Alberta Environment and Parks, as amended,
 - ii. amendments and
 - iii. bulking agents;
- (v) “feedstock preparation area” means the area where feedstocks are received and temporarily stored for processing prior to active composting;
- (w) “foreign matter” means any matter over 2 mm in dimension that results from human intervention and has organic or inorganic components such as metal, glass, synthetic polymers (for example plastic and rubber) and that may be present in the compost but excluding mineral soil, woody material, and pieces of rock;
- (x) “final closure” means the period after all feedstock acceptance has ceased;
- (y) “groundwater” means groundwater as defined in the *Water Act*;
- (z) “groundwater contamination” means a change in water quality that produces a noticeable or measurable change in groundwater characteristics;
- (aa) “groundwater monitoring well” means a water well drilled at a compost facility to measure groundwater levels and collect groundwater samples for the purpose of physical, chemical, or biological analysis to determine the concentration of groundwater contaminants;

- (bb) “groundwater quality control limit” means a concentration of a key indicator parameter above which there is a risk that groundwater quality is impacted by composting activity;
- (cc) “hydraulic conductivity” means the ease with which a fluid can be transported through a material;
- (dd) “ISO/IEC 17025” means the international standard developed and published by the International Organization for Standardization (ISO), specifying the management and technical requirements for laboratories;
- (ee) “liner” means a continuous layer constructed of natural or man-made materials, beneath or on the sides of a structure or facility, which restricts the downward or lateral migration of the contents of the structure or facility;
- (ff) “mature compost” means a stable compost that has little or no organic phytotoxic substances that can cause delayed seed germination when used as a soil amendment, and meets maturity compost quality requirements, as set out in the Guidelines for Compost Quality, published by CCME, as amended;
- (gg) “manure” means excreta in liquid or solid form from livestock, poultry, pets, animals in zoological facilities, and aquaculture;
- (hh) “manure storage facility” means a manure storage facility as defined in the *Agricultural Operation Practices Act*;
- (ii) “natural protective layer” means a continuous layer of natural materials, beneath or on the sides of a structure or facility, which restricts the downward or lateral migration of the contents of the structure or facility;
- (jj) “offensive odour” means odours that:
 - a. exceeds any Alberta Ambient Air Quality Objectives and Guidelines that has been established to manage odour, and/ or
 - b. are, in the opinion of the compliance officer(s) working for the Alberta Environment and Parks, considered disgusting or causing physical effects to receptor(s) and/or compliance officer(s), regardless of whether or not the odour intensity and offensiveness is quantified;
- (kk) “overs” means oversized materials that have not completely decomposed and are screened from the finished compost;
- (ll) “pathogens” means organisms, including some bacteria, viruses, fungi, and parasites, that are capable of producing an infection or disease in a human, animal or plant host;
- (mm) “pilot project” means a restricted composting operation at an authorized compost facility or proposed compost facility where the specific purpose is to investigate the suitability of an alternative feedstock not listed in *Acceptable Feedstock List for Compost Facilities* published by Alberta Environment and Parks, as amended, or to conduct a technology demonstration to determine the suitability of a novel composting technology prior to its commercial application if:

- a. composting technology has not been used in Alberta before,
 - b. the operating period, excluding construction, set-up time and decommissioning but including downtime, does not exceed 3 months, or
 - c. the total amount of feedstock that is processed during the operating period does not exceed 500 tonnes.
- (nn) “positive slope” means a slope that encourages positive drainage of water and minimizes ponding;
- (oo) “Process for Further Reduction of Pathogens (PFRP)” means a set of criteria used to define the time and temperature requirements needed to reduce pathogen levels in a material;
- (pp) “process water” means a combination of storm water run-on, leachate, equipment wash down water and any other wastewater generated on site;
- (qq) “processing area” means the combination of feedstock processing and the active composting area. The processing area does not include the area used for the management of run-off or process water and does not include areas where finished compost is stored.
- (rr) “product storage area” means the area used to store mature compost;
- (ss) “qualified professional” means a person who:
- a. is registered in Alberta with a professional association and is subject to the professional association’s code of ethics and disciplinary action, and
 - b. has acquired the relevant education, work experience, accreditation, and expertise to provide technical advice pertaining to this Code of Practice;
- (tt) “receiving area” means the area used to receive and temporarily store incoming feedstocks;
- (uu) “receptor sites” means sites that may be exposed to odorous substances originating from a compost facility;
- (vv) “residuals” means unwanted non-organic materials removed from feedstocks during composting, excluding overs.
- (ww) “retention pond” means a pond that is designed to store process water and run-off from storm events;
- (xx) “run-off” means any rainwater or meltwater that drains as surface flow from the receiving, processing, curing and associated storage areas of a compost facility;
- (yy) “run-on” means any rainwater or meltwater that drains as surface flow onto the receiving, processing, curing, and associated areas of a compost facility;
- (zz) “sharp foreign matter” means any foreign matter over 3 mm in size that may cause damage or injury to humans and animals during or resulting from its intended use, and may consist of, but is not limited to the following: metallic objects or pieces thereof; glass or porcelain or pieces thereof;

- (aaa) “source-separated organics” means the organic fraction of municipal solid waste, that has been accumulated and pre-sorted by residential or industrial, commercial, and institutional generators, and collected separately from hazardous waste material and non-compostable material;
- (bbb) “storage capacity” means the storage area size that is capable of storing one year’s worth of compost production;
- (ccc) “subsoil” means the layer of soil directly below the topsoil, to a maximum depth of 1.2 metres below the topsoil surface, that consists of the B and C horizons as defined in The System of Soil Classification for Canada, Agriculture and Agri-Food Canada, 1998, Publication 1643, 3rd Edition, as amended or replaced from time to time;
- (ddd) “topsoil” means the uppermost layers of soil that consist of the L, F, H, O, and A horizons as defined in The System of Soil Classification for Canada, Agriculture and Agri-Food Canada, 1998, Publication 1643, 3rd Edition, as amended or replaced from time to time;
- (eee) “trace elements” means chemical elements present in compost at a very low concentration;
- (fff) “water table” means the upper level of groundwater: the level below which the pore spaces in the soil or rock are saturated with water;
- (ggg) “water well” means an opening in the ground, whether drilled or altered from its natural state, that is used:
 - a. for the production of groundwater for any purpose;
 - b. obtaining data on groundwater; or
 - c. recharging an underground formation from which groundwater can be recovered, and includes any related equipment, buildings, structures, and appurtenances;
- (hhh) “working surface” means a surface that can withstand the wear and tear of composting equipment and forms the base of the receiving, feedstock preparation, active composting, screening, and curing areas of a composting facility;
- (iii) “vegetative matter” means source-separated organic waste that consist of unprocessed agricultural crop residues, or plant matter resulting from gardening, horticulture, landscaping or land clearing, including but not limited to unprocessed/non-treated wooden material, leaves, garden debris, and yard waste.
- (jii) “vermicompost” means compost produced through the vermicomposting process and that may contain worm castings;
- (kkk) “vermicomposting” means the mesophilic process of bio-oxidation and stabilization of organic solid wastes by epigeic earthworm species which turn, fragment, aerate, and increase microbial activity in the solid waste substrate resulting in vermicompost;
- (lll) “year” means a calendar year.

APPLICABILITY

- 2 (1)** This Code of Practice outlines the minimum requirements for the design, construction, operation, monitoring, and closure of Class I and Class II Compost Facilities.
- (2) This Code of Practice applies to:
- (a) Class I Compost Facility that accepts not more than 20,000 tonnes of feedstock per year; and
 - (b) Class II Compost Facility that accepts not more than 20,000 tonnes of vegetative matter or manure per year.
- (3) This Code of Practice does not apply to:
- (a) Class I or Class II Compost Facility that accepts more than 20,000 tonnes of feedstock per year or Compost Facilities under an *Environmental Protection and Enhancement Act* (EPEA) approval.
 - (b) a compost facility that receives only sludge as defined in the Wastewater and Storm Drainage Regulation (AR 119/93).
 - (c) a residential composter as defined in the Activities Designation Regulation (AR 276/2003).
 - (d) a manure storage facility as defined in the *Agricultural Operation Practices Act*.

COMPLIANCE WITH THE CODE OF PRACTICE

- 3 (1)** For the purposes of section 24(2) of the Waste Control Regulation (AR 192/96), the person responsible for a Class I or Class II compost facility shall comply with the requirements set out in this Code of Practice.

COMPOST FACILITIES APPLICATION

- 4 (1)** In addition to any information required by the Director under the Approvals and Registrations Procedure Regulation (AR 113/93), the person responsible for a Class I or Class II Compost Facility shall submit an application for registration or notification for a newly proposed composting facility, or amendment to an existing registration or notification of a compost facility containing, at a minimum, the following documents:
- (a) Registration Application
- i. a completed registration application form;
 - ii. a completed Class I Compost Facility checklist;
 - iii. a facility design plan and specifications;
 - iv. a soil conservation plan;
 - v. an operations plan;
 - vi. a fire prevention and control plan;
 - vii. a nuisance management plan;
 - viii. an odour management plan;
 - ix. a groundwater monitoring program;
 - x. a background groundwater quality report; and
 - xi. financial security

(b) Notification Application

- i. a completed notification form;
- ii. a completed Class II Compost Facility checklist;
- iii. a facility design plan and specifications;
- iv. a soil conservation plan;
- v. an operations plan;
- vi. a fire prevention and control plan;
- vii. a nuisance management plan; and
- viii. an odour management plan.

- (2) The documents submitted to the Director under Section 4(1) must be submitted in the form and manner prescribed by the Director.

COMPOST FACILITIES APPLICATION REQUIREMENTS

5 (1) Facility Design Plan and Specifications

- (1) Further to the requirements in section 4(1), unless otherwise authorized by the Director in writing, the person responsible for a Class I or Class II compost facility shall submit a written facility design plan and specifications that is prepared and signed by a Qualified Professional.
- (2) In the written facility design plan and specifications, the person responsible for a Class I or Class II Compost Facility shall include at least each of the following.
 - (a) A design report that describes the proposed:
 - i. types of feedstock and associated amendments that will be processed at the compost facility;
 - ii. composting method(s) that will be used to process feedstocks and amendments;
 - iii. design capacity, including:
 - a. maximum feedstock preparation area capacity (m³);
 - b. maximum amendment storage area capacity(m³);
 - c. maximum processing area capacity(m³);
 - d. maximum curing area capacity(m³);
 - e. maximum product storage area capacity(m³);
 - f. maximum residuals storage area capacity(m³);
 - iv. maximum Design Capacity for each area listed in 5(1)(2)(a)(iii) shall be defined in the Design Plan. This shall include the maximum length, width, height, and volume (m³) of all windrows and stockpiles;
 - v. total number of piles for all processing and storage areas;
 - vi. orientation of piles relative to grading of processing areas;
 - vii. location and layout of windrows and stockpiles;
 - viii. spacing between windrows and stockpiles;

- ix. minimum setbacks of windrows and stockpiles from the compost facility's property line;
- x. the expected density range of composting feedstocks and amendments;
- xi. details of components of the compost facility;
- xii. fire access lanes and fire breaks;
- xiii. environmental control measures included in the design;
- xiv. monitoring systems;
- xv. a groundwater monitoring system for Class I Compost Facilities, unless otherwise authorized in writing by the Director;
- xvi. a description and interpretation of groundwater elevations, flow, patterns and composition for Class I Compost Facilities;
- xvii. a design for liner for receiving areas, feedstock storage areas, active composting areas, curing areas, and process water retention ponds;
- xviii. a working surface in processing and product storage areas that has a positive slope and capable of withstanding wear through normal operations;
- xix. a run-on control system to prevent the flow of water onto developed areas of the composting facility for events of up to at least the peak discharge from a 1 in 25 year – 24-hour duration storm event; and
- xx. a run-off control system to collect and control the volume of process water run-off for a 1 in 25 year – 24-hour duration storm event.

(3) Maps, drawings, and specifications that include:

- a. a site plan and/or aerial photograph showing the proposed compost facility location relative to adjacent developments, residences, potable water sources, public roadways, and natural water bodies;
- b. topographic site plans showing the overall site development and setbacks from property lines;
- c. cross-sections showing grades and elevations of working surfaces in receiving areas, feedstock storage, active composting areas, and curing areas, and process water retention ponds;

(4) In addition, the person responsible for a Class I or Class II Compost Facility shall submit a statement that the site is suitable for composting as interpreted by a Qualified Professional.

(2) Soil Conservation Plan

(1) The person responsible for a Class I or II Compost Facility shall submit a Soil Conservation Plan that includes at a minimum, the following:

- (a) provisions to conserve all topsoil and subsoil for reclamation;
- (b) the location of the stockpiles;
- (c) the content of the stockpiles;
- (d) the volume of the stockpiles; and
- (e) provisions to stockpile the soil as follows:
 - i. to locate all soil stockpiles at the facility;
 - ii. on stable foundations;

- iii. topsoil on undisturbed topsoil;
- iv. subsoil on undisturbed subsoil

(3) Operations Plan

(1) The Operations Plan submitted by the person responsible for a Class I or Class II Compost Facility shall include, at a minimum, the following:

- (a) a list of feedstocks accepted at the compost facility;
- (b) feedstock acceptance policies and inspection procedures;
- (c) description of how feedstocks with a high moisture content or a high potential for creating offensive odours will be managed upon receipt and during composting process;
- (d) prohibited waste handling procedures;
- (e) site security and public access control procedures;
- (f) a site safety and emergency response plan;
- (g) working surface maintenance program;
- (h) a composting process plan, including:
 - i. a description of the composting method or technology used;
 - ii. procedures for maintaining aerobic conditions;
 - iii. corrective measures for offensive odours;
 - iv. a pathogens reduction plan;
 - v. a composting process monitoring plan, including temperature monitoring program, compost mix (carbon to nitrogen ratio), moisture, and porosity;
 - vi. quality assurance and quality control program, based on regulatory requirements;
 - vii. procedures for curing compost to meet maturity requirements;
 - viii. procedures for storage and management of mature product;
 - ix. procedures for preventing pathogen re-growth in the final product;
- (i) compost quality testing and verification plan to confirm compost is mature before removal from processing areas;
- (j) process water management procedures including monthly monitoring of water levels in retention ponds, and if applicable, monthly process water reuse or removal; and
- (k) procedures for handling and disposal of residual materials.

(2) In addition to the requirements in 5(3)(1), the Operations Plan for the person responsible for a Class I Compost Facility pursuant to this Code of Practice shall include the following:

- (a) liner inspection and maintenance program;
- (b) environmental monitoring program;
- (c) groundwater monitoring program;
- (d) contingency plan for reasonably foreseeable events; and
- (e) reporting procedures.

(4) Fire Prevention and Control Plan

- (1) The Fire Prevention and Control Plan submitted by the person responsible for a Class I or Class II Compost Facility shall include, at a minimum, the following:
 - (a) identification of appropriate controls to isolate or protect combustible materials from ignition sources, including but not limited to cutting and welding, static electricity discharges, and smoking;
 - (b) procedures and schedules for the inspection, monitoring and restricting of excessive internal temperatures in stockpiles of feedstocks and amendments in active composting and curing piles, and screening overs, residual wastes, and finished compost;
 - (c) appropriate controls to prevent the accumulation of combustible dust or debris on or around buildings, fences, vegetation, vehicles, stationary equipment, and mobile equipment;
 - (d) an access plan that provides sufficient roadway, aisles, and lanes to, around the perimeter of, and within all processing areas to allow fire control equipment access;
 - (e) training program for site personnel related to the extinguishing of surface and internal fires in stockpiles of feedstocks, amendments, screening overs, residual wastes, and finished compost, active composting and curing piles; and
 - (f) regular compost facility inspections by trained personnel.

(5) Odour Management Plan

- (1) The Odour Management Plan for submitted by the person responsible for a Class I or Class II Compost Facility shall include, at a minimum, the following:
 - (a) a description of all odour control technologies or management practices that will be used to prevent and mitigate offensive odours;
 - (b) a method to monitor and detect odours;
 - (c) a procedure to track and document public complaints regarding odours from the compost facility;
 - (d) a procedure to respond to public complaints regarding odours originating from the compost facility;
 - (e) a map showing the location and distance to receptor sites within 450 meters of the compost facility; and
 - (f) an odour contingency response plan to remedy offensive odours originating from the compost facility.

(6) Groundwater Monitoring Program

- (1) The groundwater monitoring program for a Class I Compost Facility shall be prepared by a Qualified Professional and shall include, at a minimum, the following:
 - (a) a Class I Compost Facility shall establish background levels for each monitoring well prior to start of composting operations;
 - (b) an existing Class I Compost Facility shall establish background levels by:
 - i. using historical data; or

- ii. obtaining groundwater samples from monitoring wells established in nearby areas not affected by composting activity;
- (c) establish groundwater quality control limits for each naturally occurring parameter, once background monitoring is complete;
- (d) a detailed program for groundwater sample collection frequency and analysis, that includes, at a minimum, the following:
 - i. monitoring the depth to water at each monitoring well at the time of sampling;
 - ii. retrieval of two representative samples for four consecutive years until background monitoring is complete;
 - iii. retrieval of one sample per year only after background monitoring is complete;
 - iv. laboratory analysis of the samples for parameters as set out in Table 1; and
 - v. laboratory analysis of the samples for additional parameters as specified in writing by the Director.
- (e) groundwater contingency plan.

TABLE 1 - Groundwater Parameters for Routine Monitoring

| Parameters | Parameters | Parameters |
|----------------------|-------------------------|----------------------|
| Arsenic, dissolved | Total phosphorus | Total organic carbon |
| Barium, dissolved | Ammonia | Calcium |
| Boron, dissolved | Nitrate-Nitrogen | Magnesium |
| Cadmium, dissolved | Total Kjeldahl Nitrogen | Sodium |
| Chromium, dissolved | pH | Potassium |
| Copper, dissolved | Total dissolved solids | Chloride |
| Iron, dissolved | Electrical conductivity | Sulphate |
| Lead, dissolved | Chemical oxygen demand | E. coli |
| Manganese, dissolved | | Total coliform |
| Mercury, dissolved | | |
| Vanadium, dissolved | | |

(7) Nuisance Management Plan

- (1) The person responsible for a Class I or Class II Compost Facility shall develop and submit a nuisance management plan to the Director that describes how nuisances, including but not limited to, litter, wildlife, noise, insects, weeds, disease vectors, and birds, will be prevented or controlled.

(8) Financial Security

- (1) Prior to the issuance or amendment of a registration for a Class I Composting Facility, the person responsible shall provide financial security pursuant to Part 4, Sections 27 to 33 of Waste Control Regulation (AR 192/1996).
- (2) The financial security requirement in 5(8)(1) shall be calculated based on the maximum annual quantity of feedstocks and amendments that will be accepted at the Class I Compost Facility, as contained in the application documents submitted pursuant to Section 4(1)(a) of this Code of Practice.

PILOT PROJECTS

6 (1) Pilot Requirements

- (1) The person responsible for a pilot project shall submit a written notice to the Director describing the following:
 - (a) objectives of the proposed pilot project;
 - (b) how the proposed pilot project will fit in with existing or proposed compost facility;
 - (c) composting method and procedure that will be used;
 - (d) analytical tests to be performed and data to be collected; and
 - (e) operations plan for the pilot project.

(2) Pilot Operations Plan

- (1) The operations plan of a pilot project shall include, at a minimum, the following if applicable:
 - (a) a description of feedstock type(s);
 - (b) a description of bulking material(s);
 - (c) a description of process water that will be produced;
 - (d) a description of proposed use for finished and unfinished compost;
 - (e) an estimate of the volume of process water produced, bulking agents and feedstock materials that will be used, and finished compost produced during the duration of the pilot project;
 - (f) a detailed description of the composting operations and methodology;
 - (g) a fire control and prevention plan;
 - (h) an odor management plan;
 - (i) a nuisance management plan;
 - (j) record keeping for all operational activities;
 - (k) a description of the composting pad; and
 - (l) a contingency plan for addressing nuisance conditions and unforeseen events such as discovery of unacceptable materials, contamination or discharge of process water.

(3) Pilot Environmental Issues

- (1) The person responsible for a pilot project shall provide the Director with a detailed assessment of any potential impacts to surface water and groundwater and how these impacts will be prevented or mitigated.

(4) Pilot Compost Quality Monitoring Plan

- (1) The person responsible for a pilot project shall provide the Director with a compost quality monitoring plan describing sampling procedures, pathogen reduction methodology, and analytical testing procedures.

(5) Pilot Project Closure Plan

- (1) The person responsible for the pilot project shall provide the Director with a pilot project closure plan describing all the actions that will be taken to properly close the pilot project. The closure activities must be completed within thirty (30) days after pilot project completion or termination.

(6) Pilot Project Closure Report

- (1) The person responsible for the pilot project shall submit a pilot project closure report to the Director within sixty (60) calendar days after completion of the pilot project. The pilot project closure report shall include, at a minimum, the following information:
 - (a) a summary of each project objective and whether the objective was achieved;
 - (b) identification of expected and unexpected results;
 - (c) environmental impacts resulting from the pilot project;
 - (d) successes and failures; and
 - (e) data from analytical test results of compost material.

(7) Conversion to Permanent Facility for Proposed Compost Facilities

- (1) To convert a pilot project into a fully authorized Class I or Class II Compost Facility, the person responsible for a pilot project shall submit an application to the Director, within ninety (90) calendar days of pilot project completion, pursuant to Section 4(1) of this Code of Practice.

(8) Conversion to Permanent Activity for Authorized Compost Facilities

- (1) The person responsible for a Class I or Class II Compost Facility shall submit a written request to the Director to convert the activity of a pilot project into a permanent activity.
- (2) The person responsible for a Class I or Class II Compost Facility, must receive a written authorization from the Director before converting the activity of a pilot project into a permanent activity.

CHANGES TO PLANS OR PERSON RESPONSIBLE

- 7 (1) The person responsible for a Class I or Class II Compost Facility shall submit proposed change(s) to any of following plans for review and authorization by the Director prior to implementation, if the proposed change is a fundamental change to authorized composting activity or has potential impacts on the facility's operation or the environment:
 - (a) Design Plan and specifications
 - (b) Operations Plan
 - (c) Fire Prevention and Control Plan
 - (d) Odour Management Plan
 - (e) Groundwater Monitoring Program
 - (f) Nuisance Management Plan

- (2) Following the Director's authorization of the proposed changes to one or more of the plans in subsection (1), the person responsible for a Class I or Class II Compost Facility shall immediately incorporate the authorized changes into the facility's Operating Record, and compost facility personnel shall be notified and trained on specific changes accordingly.
- (3) The Director shall be notified in writing regarding any changes to the person responsible for a Class I or Class II Compost Facility within 30 days.

CONSTRUCTION SPECIFICATIONS

8 (1) Authorization to Construct

- (1) Construction of a new compost facility or the expansion of an existing compost facility shall not commence until:
 - (a) Registration has been issued by the Director for a Class I Compost Facility; or
 - (b) The Director has acknowledged the receipt of the Notification for a Class II Compost Facility.

(2) Facility Construction

- (1) The construction of a Class I or Class II composting facility shall comply with the Design Plan and Specifications submitted by the person responsible pursuant to Section 4(1) of this Code of Practice, and authorized by the Director. Any deviations from the Design Plan and Specifications or from the construction requirements outlined in 8(3) through 8(6) must be authorized in writing by the Director.

(3) Environmental Setbacks

- (1) In addition to the setback requirements outlined in the Subdivision and Development Regulation (AR 43/2002), no one shall construct or operate the Processing Area of a Compost Facility unless otherwise authorized in writing by the Director:
 - (a) within 30 meters from a water body;
 - (b) within 100 metres from a water well;
 - (c) within 15 meters from the property line; and
 - (d) within 10 meters from a groundwater monitoring well.

(4) Liner System for Processing Areas

- (1) The liner system included in the Design Plan and Specifications shall include, at a minimum, the following construction criteria:
 - (a) the liner system must be placed under all active areas of the facility, including the receiving, feedstock preparation, amendment storage, active composting, curing, and screening areas;
 - (b) the liner system must have a separation of at least 1 metre between the seasonally high water table and the bottom of the liner;
 - (c) the liner system must have a positive slope to avoid ponding; and
 - (d) the liner system must be constructed of a clayey material:

- i. with a thickness of at least 0.5 metres measured perpendicular to the liner surface; and
 - ii. with a hydraulic conductivity of 1×10^{-9} m/sec or less or alternative material that provides equivalent protection; or
 - (e) alternative liner material that provides equivalent or superior performance to 8(4)(1)(d).
- (2) Notwithstanding 8(4)(1), the liner system shall be comprised of a natural protective layer only where all the following conditions are met:
 - (a) the liner system prevents the lateral movement and downward migration of process water;
 - (b) the natural protective layer is comprised of 2 metres or more of a material that has a hydraulic conductivity of 1×10^{-8} m/sec or less;
 - (c) there is at least 1 metre of a material between the bottom of natural protective layer and the seasonally high groundwater table; and
 - (d) the natural protective layer has a positive slope to avoid ponding.

(5) Retention Pond Liner

- (1) The retention pond liner included in the Design Plan and Specifications must include, at a minimum, the following construction criteria:
 - (a) a separation of at least 1 metre between the seasonally high water table and the bottom of the liner; and
 - (b) construction of a clayey material:
 - i. with a thickness of at least 1 metre measured perpendicular to the liner surface, and
 - ii. that has a hydraulic conductivity of 1×10^{-9} m/sec or less or alternative material that provides equivalent protection.
- (2) Notwithstanding 8(5)(1)(a), the retention pond liner shall be constructed of a natural protective layer only where all the following conditions are met:
 - (a) the retention pond liner prevents the lateral movement and downward migration of process water;
 - (b) there is 5 metres or more of a clayey material that has a hydraulic conductivity of 1×10^{-8} m/sec or less; and,
 - (c) there is at least 1 metre of a clayey material between the bottom of natural protective layer and the seasonally high groundwater table.

(6) Groundwater Monitoring System

- (1) Unless otherwise authorized in writing by the Director, the person responsible for a Class I Compost Facility shall install a groundwater monitoring system that meets, at a minimum, the following criteria:
 - (a) at least one monitoring well up gradient of the facility;
 - (b) at least two monitoring wells down gradient of the facility; and
 - (c) a type of well that is appropriate to monitor for contaminants.

(7) Soil Conservation Plan

- (1) The person responsible for a Class I or Class II Compost Facility shall:
 - (a) stockpile soil according to the soil conservation plan submitted pursuant to Section 4(1) of this Code of Practice, and authorized by the Director;
 - (b) take all steps necessary to prevent erosion, including but not limited to, all of the following:
 - i. revegetating the stockpiles; and
 - ii. any other steps as authorized in writing by the Director.
 - (c) immediately suspend conservation of soil when wet or frozen field conditions will result in mixing, loss or degradation of soil; and
 - (d) recommence conservation of soil only when wet or frozen field conditions in subsection (c) no longer exist.

FACILITY OPERATIONS

9 (1) Facility Operations and Maintenance

- (1) Unless otherwise authorized in writing by the Director, the person responsible for a Class I or Class II Composting Facility pursuant to this Code of Practice shall at all times operate the facility in accordance with the Operations Plan submitted and authorized by the Director and the minimum operating requirements outlined in Section 9(2) to 9(16) of this Code of Practice.
- (2) The person responsible for a Class I or II Compost Facility shall always operate and maintain the compost facility to comply with their Design Plan and Specifications unless otherwise authorized in writing by the Director.

(2) Certified Operator

- (1) The day-to-day operations of a Class I or Class II composting facility shall be supervised by a Certified Operator in accordance with Section 25 of the Waste Control Regulation, as amended.

(3) Signage

- (1) The person responsible for a Class I or II Compost Facility shall:
 - (a) post; and,
 - (b) maintain signs at the compost facility entrance providing, at a minimum, the following information:
 - i. name of person responsible;
 - ii. telephone numbers for:
 - a. 24-hour emergency contact;
 - b. the local fire department; and
 - c. Alberta Environment and Parks (1-800-222-6514); and,
 - iii. hours of operation.

(4) Feedstock List

- (1) Unless otherwise authorized in writing by the Director, the person responsible for a Class I or Class II Compost Facility is prohibited from accepting and processing any feedstock except those listed in the *Acceptable Feedstock List for Compost Facilities* published by Alberta Environment and Parks, as amended.

(5) Acceptance, Inspection, Storage of Feedstock and Amendments

- (1) The person responsible for a Class I or Class II Compost Facility shall operate their compost facility in accordance with the following feedstock and amendments acceptance, inspection, and storage requirements:
 - (a) all feedstocks and amendments accepted at a Class I or Class II Compost Facility will be visually inspected, and unacceptable materials shall be removed and segregated for disposal at an authorized waste management facility.
 - (b) unacceptable materials removed from feedstocks and amendments shall not be stored at compost facility for more than five days or in quantities greater than 15 cubic meters, whichever comes first.
 - (c) feedstocks shall be pre-processed and mixed with amendments as required, and incorporated into active composting piles within 24 hours upon receipt at a compost facility.
 - (d) amendments shall be stored for a maximum of 12 months.
 - (e) feedstocks and amendments that are temporarily stored in stockpiles at the composting facility shall be handled on a first in - first out basis.

(6) Composting Methods

- (1) The person responsible for a Class I or Class II facility shall ensure that all compost recipes shall be designed to ensure that the initial compost mix results in:
 - (a) carbon to nitrogen (C:N) ratio of 20:1 to 40:1;
 - (b) a bulk density of less than 700 kg/m³;
 - (c) a pH in the range of 6 to 8; and
 - (d) moisture content of 40 to 60%.
- (2) The person responsible for a Class I or II Compost Facility shall manage authorized feedstock and amendment materials by using any of the following composting methods:
 - (a) Windrow composting
 - i. The construction, carbon to nitrogen ratio, moisture content, porosity and turning frequency of windrows shall be conducted in the manner that ensures controlled biological decomposition under aerobic conditions are maintained throughout the composting process.
 - ii. Windrows shall be constructed parallel to the slope of the land at the compost facility and turned at a minimum five times per year.
 - iii. The construction of windrow piles shall not exceed 3.66 meters (12 feet) high by 7.62 meters (25 feet) wide at the base, or alternative configuration

that provides for the suitable conditions under which aerobic composting will occur.

(b) In-vessel composting

- i. The construction, loading, carbon to nitrogen ratio, moisture content, porosity and turning frequency shall be conducted in the manner that facilitates controlled biological decomposition under aerobic conditions are maintained throughout the composting process.

(c) Aerated static pile composting

- i. The construction of aerated static piles, the aeration system, carbon to nitrogen ratio, porosity and moisture content, shall be conducted in the manner that enables controlled biological decomposition under aerobic conditions are maintained throughout the composting process.

(d) Static pile composting

- i. The construction of static piles, carbon to nitrogen ratio, moisture content, and turning frequency shall be conducted in the manner that facilitates controlled biological decomposition under mainly aerobic conditions are maintained throughout the composting process.
- ii. Sufficient porosity shall be maintained in the static piles, and they shall be turned, at a minimum, two times per year to facilitate the reintroduction oxygen into the composting process and maintain aerobic conditions.
- iii. The pile height for static piles shall not exceed 5 meters (16.4 feet) high.

(e) Vermicomposting

- i. The construction, placement, and maintenance of vermicomposting beds, bins, and batch reactor systems shall be conducted in the manner that ensures the survival of the earthworms.
- ii. The vermicomposting process shall be managed to achieve the pathogen reduction requirements specified in Table 2.

(f) Alternative methods

- i. The person responsible for a Class I or II Compost Facility shall submit a written request to the Director for review and authorization of an alternative composting method.
- ii. The request to use an alternative composting method shall include, at a minimum, a detailed description of the alternative composting method and how the method will be managed to maintain aerobic conditions, facilitate controlled biological decomposition, and comply with the facility operation requirements specified in this Code of Practice.

(7) Pathogen Reduction

- (1) The person responsible for a Class I or II Compost Facility shall ensure that the composting process reduces pathogens pursuant to the pathogen reduction criteria set out in the Guidelines for Compost Quality, published by CCME, as amended.
- (2) Compost that contains any pathogens in amounts that exceed the pathogen reduction requirements set out in the Guidelines for Compost Quality, published by CCME, as

amended, shall be designated for additional processing or disposed of at an authorized waste management facility.

- (3) Test results of samples must be received by the person responsible for the compost facility prior to removing the compost from the facility where it was produced.
- (4) Pathogen reduction activities shall be documented, including compost pile temperatures representative of the composting materials, and records of turnings as appropriate, based on the composting method used.
- (5) Pathogen reduction activities shall, at a minimum, meet the following criteria:
 - (a) Using in-vessel composting method, the material shall be maintained at operating conditions of 55°C or greater for three consecutive days; or
 - (b) Using the aerated static pile composting method, the material will be maintained at operating conditions of 55°C or greater for three consecutive days. The aerated static pile shall be covered with a minimum 6 inches (15.24 cm) insulating layer of material, such as a layer of cured compost or wood chips, to ensure that all areas of the material are exposed to the required temperature; or
 - (c) Using the windrow composting method, the material shall attain a temperature of 55 °C or greater for at least 15 consecutive days during the composting period. During this high-temperature period including the period when the temperature of compost pile exceed 65 °C, the windrow shall be turned at least five times; or
 - (d) Alternative methods of compliance to meet pathogen reduction requirements may be authorized by the Director based on a demonstration by the person responsible for a Class I or II Compost Facility that the proposed method achieves an equivalent pathogen reduction.
 - (e) To determine the Process for Further Reduction of Pathogens (PFRP) compliance criteria set out in subsections (a) to (c), the minimum of all temperature measurements taken from the compost pile on each day and not the average of temperature measurements shall be used.
 - (f) Process water or other sources of moisture that may contain pathogens shall not be added to composting material following the start of any of the pathogen reduction periods outlined in subsections (a) to (c).

(8) Fire Prevention and Control

- (1) In addition to the requirements of the Alberta Fire Code, as amended, the person responsible for a Class I or Class II Compost Facility that is subject to this Code of Practice shall:
 - (a) implement the Fire Prevention and Control Plan submitted and authorized under Section 4(1).
 - (b) maintain suitable year-round access to, around the perimeter of, and within all Processing Areas for fire control equipment access in accordance with the access plan submitted as part of the Fire Prevention and Control Plan
 - (c) make available appropriate material handling equipment for moving feedstocks, amendments, screening overs, residual wastes, and finished compost during fire-fighting operations.

- (d) make available for use all year round adequate supply of water for fire suppression or an alternative method.
- (e) provide sufficient space to allow for the teardown of stockpiles or active composting or curing piles in the event of a fire on the surface or within the stockpile at all times.
- (f) isolate or protect combustible materials from ignition sources, including but not limited to, cutting and welding, static electricity discharges, and smoking, at all times.
- (g) regularly monitor stockpiles, active composting piles, and curing piles.
- (h) clean the facility and equipment at sufficient intervals to prevent the accumulations of combustible dust and spilled combustible or flammable liquids.
- (i) implement any additional procedures or conditions required by the Director or local Fire Authority.

(9) Operations Plan

- (1) The person responsible for a Class I or Class II Compost Facility shall:
 - (a) implement; and
 - (b) update the Operations Plan in compliance with the compost facility Design Plan and Specifications, as specified in section 5(1).

(10) Odour Management Plan

- (1) The person responsible for a Class I or Class II Compost Facility shall:
 - (a) implement; and
 - (b) update an Odour Management Plan.

(11) Odour Complaints

- (1) Upon receiving a complaint regarding an offensive odour resulting from a compost facility, the person responsible for a Class I or Class II Compost Facility shall:
 - (a) investigate the complaint;
 - (b) record the following information regarding the complaint:
 - i. the place, date and time of the complaint;
 - ii. the name, and address of the complainant;
 - iii. the nature of the complaint; and
 - iv. a summary of all measures and actions that were taken to address the complaint.

(12) Offensive Odours

- (1) The person responsible for a Class I or II compost facility shall operate and manage the compost facility in a manner that controls and prevents offensive odours from occurring.
- (2) Upon discovery of an offensive odour resulting from the compost facility, the person responsible for a Class I or Class II Compost Facility shall:
 - (a) implement authorized Odour Contingency Response Plan, which shall include:

- i. monitor, measure, contain, remove, destroy or otherwise dispose of the substance or thing causing the offensive odour or control or prevent the offensive odour from occurring again;
 - ii. install, replace or alter any equipment or thing in order to control or eliminate the offensive odour;
 - iii. construct, improve, extend or enlarge the facility, structure or thing if that is necessary to control or eliminate the offensive odour; or
 - iv. mitigate the odour in accordance with the Odour Management Plan.
- (b) record:
- i. the date of the occurrence of the offensive odour;
 - ii. the actions taken to minimize or remedy the offensive odour; and
- (c) take any action deemed necessary by the Director, in addition to any other duties imposed under the Act or the regulations under the Act.

(13) Facility Capacity

- (1) The amount of feedstock accepted each year at a Class I or Class II compost facility shall not at any time exceed the maximum annual capacity of the facility submitted and authorized by the Director pursuant to Section 4(1).
- (2) The person responsible for a Class I or Class II Compost Facility shall not, at any time, exceed the compost processing area capacity, curing area capacity, residuals storage area capacity, or product storage capacity area outlined in the Design Plan and Specifications submitted and authorized by the Director pursuant to Section 4(1).

(14) Nuisance Management

- (1) The person responsible for a Class I or II Compost Facility shall control nuisances such as, but not limited to, litter, wildlife, weed growth, noise, disease vectors, and dust, by:
 - (a) establishing and maintaining litter controls that include:
 - i. minimizing the escape of litter from the compost facility;
 - ii. implementing controls to prevent litter to be washed, blown, or transported onto adjacent properties; and
 - iii. retrieving litter that has been washed, blown, or transported onto adjacent properties, provided the consent of the owner of the adjacent property is first obtained.
 - (b) managing the feedstock storage and the composting process to minimize disease vectors;
 - (c) applying weed controls to prevent the accumulation of weeds at the facility and in compost products; and
 - (d) setting up or constructing artificial barriers, utilizing natural barriers, or other effective measures to control access to the site to prevent uncontrolled access and depositing of wastes or other materials.

(15) Finished Compost Storage

- (1) The person responsible for a Class I or II Compost Facility shall ensure that finished compost is stored in accordance with the following:
 - (a) individual stockpiles of finished compost shall not exceed 5000 m³ in volume and 7.6 meters (25 feet) in height.
 - (b) a clear aisle of no less than 3 meters shall be maintained between adjacent storage piles to allow for equipment access.
 - (c) finished compost moisture content shall be maintained at between 35 per cent and 50 per cent.

(16) Dead Animals Composting Operation

- (1) Unless otherwise authorized by the Director in writing, the person responsible for composting of dead animals at a Class I Compost Facility shall comply with all the requirements stipulated in this Code of Practice, and the following minimum operation standards:
 - (a) The person responsible for a Class I Compost Facility shall incorporate dead animal(s) into compost mix upon receipt at the facility.
 - (b) The person responsible for a Class I Compost Facility shall ensure that compost piles are constructed and managed in the following manner:
 - i. The person responsible for a Class I Compost Facility shall prepare a 60 cm (24-inch) depth bed with a high carbon bulking agent material such as sawdust or similar material and lay the dead animal at the center of the bed.
 - ii. Where one or more dead animals are composted, the volume of the dead animal(s) in the compost pile must not exceed 25 per cent of the total volume of the compost pile.
 - iii. The person responsible for a Class I Compost Facility shall ensure the dead animals in the compost pile are layered with a minimum of 60 cm (24 inches) sawdust or similar material between layers.
 - iv. After positioning the dead animals, the person responsible for a Class I Compost Facility shall immediately cover the dead animals with a 60 cm (24 inch) layer of sawdust or similar material.
 - v. Windrow piles shall be no more than 3.6 m (12ft) wide at the base and no more than 2.1m (7ft) high.
 - vi. The compost pile shall not be turned and shall remain undisturbed for a minimum of 90 days.
 - vii. After the 90 days, the person responsible for a Class I Compost Facility shall visually examine the compost pile to determine whether the pile needs to be turned or mixed based upon the degree to which the dead animals have degraded and the presence or absence of offensive odors.
- (2) The person responsible for a Class I Compost Facility shall repeat the composting process for another 90 days until the following conditions are met:
 - (a) No soft animal tissue is evident;

- (b) No offensive odors is evident;
 - (c) No bones or bone fragments larger than 15 cm (6 in) in dimension are evident; and
 - (d) No other animal matter larger than 2.5 cm (1 in) in dimension is evident.
- (3) The person responsible for a Class I Compost Facility shall ensure that the use of the finished compost will not cause or contribute to the spread of disease, cause scavenging, or create a nuisance.
- (4) If odors, dust, or vectors are not adequately managed and persist, the person responsible for a Class I Compost Facility shall cease acceptance of dead animals as feedstock upon receipt of written notice from the Director, and dispose of the composting mixture at an authorized landfill.

ENVIRONMENTAL MONITORING STANDARDS

10 (1) Sampling and Analytical Standards

- (1) With respect to any sample required to be taken pursuant to this Code of Practice, all samples shall be:
- (a) collected;
 - (b) preserved;
 - (c) stored;
 - (d) handled; and
 - (e) analyzed in accordance with:
 - i. the Standard Methods for the Examination of Water and Wastewater, published jointly by the American Public Health Association, American Water Works Association, and the Water Environment Federation, 1998, as amended; or
 - ii. the Methods Manual for Chemical Analysis of Water and Wastes, Alberta Environmental Centre, Vegreville, Alberta, 1996, AECV96-M1 as amended; or
 - iii. the Guidelines for Compost Quality, published by the CCME, as amended; or
 - iv. The Test Methods for the Examination of Composting and Composts, published by the United States Department of Agriculture and the United States Composting Council, as amended; or
 - v. a method authorized in writing by the Director.
- (2) The person responsible for a Class I or II Compost Facility shall analyze all samples that are required to be obtained by this Code of Practice in a laboratory accredited pursuant to ISO/IEC 17025 standard, as amended, for the specific parameter(s) to be analyzed, unless otherwise authorized in writing by the Director.
- (3) The term sample as used in subsection (2) does not include samples directed to continuous monitoring equipment unless required explicitly in writing by the Director.
- (4) The person responsible for a Class I or II Compost Facility shall comply with the terms and conditions of any written authorization issued by the Director under subsection (2).

(2) Groundwater Monitoring Program

- (1) Unless otherwise authorized in writing by the Director, the person responsible for a Class I Compost Facility shall:
 - (a) implement; and
 - (b) maintain a groundwater monitoring program.
- (2) Unless otherwise authorized in writing by the Director, the person responsible for a Class I Compost Facility shall ensure that each groundwater monitoring well is:
 - (a) protected from damage; and
 - (b) locked, except when samples are taken.
- (3) If a groundwater sample cannot be collected because the monitoring well is damaged or is no longer capable of producing a representative sample:
 - (a) the groundwater monitoring well shall be cleaned, repaired or replaced; and
 - (b) a representative groundwater sample shall be collected before the next scheduled sampling date unless otherwise authorized in writing by the Director.

(3) Implementation of Groundwater Contingency Plan

- (1) Throughout the active life and final-closure of the composting facility, the groundwater quality for each parameter shall not exceed the established groundwater quality control limits.
- (2) The person responsible for a Class I Compost Facility shall immediately notify the Director and shall implement the Groundwater Contingency Plan developed in accordance with Section 5(6)(e), at any time until the end of post-closure:
 - (a) groundwater quality of one or more parameters displays an increasing trend; or
 - (b) groundwater parameters exceed the corresponding groundwater quality control limit; or
 - (c) any parameter not naturally present in groundwater is detected in three consecutive sampling events.
- (3) If at any time throughout the operational and final closure period groundwater contamination occurs at the composting facility, the person responsible for a Class I Compost Facility shall:
 - (a) immediately notify the Director in accordance with the Act and the regulations under the Act,
 - (b) identify the source that is adding contaminant mass to the groundwater;
 - (c) remove or control the source to prevent further contamination;
 - (d) construct, repair, or replace the structure or thing, if that is necessary, to avoid further contamination;
 - (e) conduct additional groundwater monitoring; and
 - (f) any other duties imposed under the Act or the regulations under the Act.

(4) Process Water Disposal Procedures

- (1) Process water from the retention pond shall be disposed of only in the following manner:
 - (a) at an Alberta Environment and Parks authorized wastewater treatment facility; or
 - (b) re-use or recirculation into the compost piles, provided the incorporation of process water into the materials being composted does not impact the ability to meet the operating requirements outlined in this Code of Practice; or
 - (c) by land application in accordance with the safe limits “Guidelines for Municipal Wastewater Irrigation” published by Alberta Environment and Parks, as amended; or
 - (d) as otherwise authorized in writing by the Director.

(5) Retention Pond Sediments

- (1) Retention pond sediments shall be disposed of only in the following manner:
 - (a) composted at the facility provided the incorporation of sediments into the materials being composted does not impact the ability to meet the operating requirements outlined in this Code of Practice; or
 - (b) at an Alberta Environment and Parks authorized waste management facility authorized to accept such waste; or
 - (c) by land application in accordance with “Guidelines for the Application of Municipal Wastewater Sludges to Agricultural Lands” published by Alberta Environment, as amended; or,
 - (d) as otherwise authorized in writing by the Director.

(6) Finished Compost Quality Monitoring

- (1) The person responsible for a Class I or Class II Compost Facility shall not allow compost produced at the compost facility to be given away, sold, used on-site, or used in the production of a soil amendment unless the compost meets:
 - (a) the compost quality requirements, as set out in the Guidelines for Compost Quality, published by CCME, as amended, for the following criteria:
 - i. maximum concentrations for trace elements;
 - ii. foreign matter;
 - iii. sharp foreign matter; and
 - iv. maturity/stability;
 - (b) pathogen reduction requirements set out in Section 9(7) of this Code of Practice;
 - (c) any other requirements as specified in writing by the Director.
- (2) The person responsible for a Class I or Class II Compost Facility shall collect, at a minimum, one representative composite sample:
 - i. from every 1000 tonnes (dry weight) of batch of compost produced; or
 - ii. once per year;whichever comes first.

- (3) The composite sample collected for compost quality analysis in subsection (2) shall be prepared from a minimum of 15 sub-samples that are representative of the entire volume of finished compost material.
- (4) The person responsible for a Class I or Class II Compost Facility shall ensure that analytical results have been received, verified, and are in compliance with subsections (1) (a) and (b) before finished compost is removed from the compost facility or used beneficially on-site.
- (5) Finished Compost material that does not meet the compost quality requirements set out in subsections (1) (a) and (b):
 - i. shall be reprocessed at the compost facility provided the incorporation of the finished compost into the materials being composted does not impact the ability to meet the operating requirements outlined in this Code of Practice; or
 - ii. shall be disposed of at an Alberta Environment and Parks authorized waste management facility permitted to accept such waste; or
 - iii. shall be managed as otherwise authorized in writing by the Director.

(7) Vermicompost Quality Monitoring

- (1) The person responsible for a Class I or Class II Compost Facility using vermicomposting shall not allow vermicompost produced at the facility to be given away, sold, used on-site, or used in the production of a soil amendment unless the vermicompost meets all the limits outlined in Table 2.
- (2) Finished vermicompost that does not meet the requirements in Table 2, shall be managed as follows:
 - (a) reprocess the vermicompost until it meets the limits specified in Table 2; or
 - (b) dispose of at an Alberta Environment and Parks authorized waste management facility permitted to accept such waste
- (3) The person responsible for a Class I or Class II Compost Facility using vermicomposting shall collect, at a minimum, one representative composite sample:
 - (a) from every 1000 tonnes (dry weight) batch of vermicompost produced; or
 - (b) once per year;whichever comes first.
- (4) The composite sample collected for vermicompost quality analysis under subsection (3) shall be prepared from a minimum of 15 sub-samples that are representative of the entire volume of finished vermicompost material.
- (5) The person responsible for a Class I or II Compost Facility using vermicomposting shall screen to remove all earthworms from the vermicompost before the final product is sold, given away, or leaves the facility.
- (6) The person responsible for a Class I or II Compost Facility using vermicomposting shall store finished vermicompost at 35 to 50 percent moisture level (by weight).

Table 2: Limits for Vermicompost

| Parameter | Limit |
|--|---|
| CCME Standards | |
| Maximum concentration for trace elements | Standards established in the most recent edition of <i>Guidelines for Compost Quality</i> , published by the Canadian Council of Ministers of the Environment (CCME), as amended or replaced from time to time. |
| Foreign matter | |
| Maturity/stability | |
| Sharp Foreign matter | |
| Other Parameters | |
| Electrical Conductivity | 150 – 350 |
| pH | 6 – 7 |
| Boron | < 20 ppm |
| Carbon | < 300,000 ppm or 30 per cent |
| Sodium | < 750 ppm |
| C:N ratio | 30:1 |
| Iron | < 15,000 ppm |
| Manganese | < 700 ppm |
| Calcium | 1 – 3 per cent |
| Magnesium | 0.2 – 0.8 per cent |
| Phosphorus | 0.15 – 1.5 per cent |
| Sulphur | 0.1 – 1.0 per cent |
| Nitrogen | 0.75 – 3 per cent |
| Potassium | 0.4 – 2 per cent |
| Pathogen Reduction Requirements | |
| Fecal coliforms | < 1,000 most probable number (MPN) per gram of total solids calculated on a dry weight basis |
| Salmonella sp. | < 3 most probable number (MPN) per 4 grams of total solids calculated on dry weight basis. |

ppm – parts per million

REPORTING AND RECORD KEEPING**11 (1) Operating Record**

- (1) The person responsible for a Class I or Class II Compost Facility shall establish and maintain an Operating Record for a composting facility until the end of the final closure period.

- (2) The Operating Record for a Class I or Class II Compost Facility shall contain, at a minimum, the following information:
- (a) a copy of the Registration or notification document;
 - (b) a current organizational chart of the operating company;
 - (c) operation/procedures logbook;
 - (d) the most recent version of the design plan for the compost facility;
 - (e) public issues and complaints;
 - (f) nuisance management;
 - (g) monitoring reports;
 - (h) inspection reports;
 - (i) maintenance records;
 - (j) records of contraventions;
 - (k) compost product quality;
 - (l) tonnage reports; and
 - (m) all annual reports for the compost facility.

(2) Monitoring Records

- (1) The person responsible for a Class I or II Compost Facility shall record and retain all the following information in respect of any sampling conducted or analyses performed in accordance with this Code of Practice for a minimum of 5 years pursuant to Section 39 of the Waste Control Regulation, unless otherwise authorized in writing by the Director:
- (a) the place, date and time of sampling;
 - (b) the dates the analyses were performed;
 - (c) the analytical techniques, methods or procedures used in the analyses;
 - (d) the names of the persons who collected and analyzed each sample; and
 - (e) the results of the analyses.

(3) Tonnage Report

- (1) Each year the person responsible for a Class I or II Compost Facility shall prepare a Tonnage Report for the compost facility covering the calendar year reported on.
- (2) The person responsible for a Class I or Class II Compost Facility shall submit the Tonnage Report to Alberta Environment and Parks online Waste Measurement System by March 31 of the year following the year on which the report is based.
- (3) The Tonnage Report shall contain, at a minimum, the following information:
- (a) total tonnes (wet weight) of feedstock accepted;
 - (b) total tonnes (wet weight) of amendments and bulking agents used;
 - (c) total tonnes (wet weight) of compost produced;

- (d) total tonnes (wet weight) of compost used, sold, or given away;
- (e) total tonnes (wet weight) residuals disposed; and
- (f) all processing and storage areas tonnage.

(4) Reporting of Contraventions

- (1) In addition to any other reporting required pursuant to the Act or the regulations, the person responsible for a Class I or II Compost Facility shall immediately report to the Director by telephone any contravention of the terms and conditions of this Code of Practice at 1-780-422-4505.
- (2) The person responsible for a Class I or Class II Compost Facility shall submit a written report to the Director within 7 days of the reporting under subsection (1).
- (3) The report required in subsection (2) shall contain, at a minimum, all of the following:
 - (a) a description of the contravention;
 - (b) the date of the contravention;
 - (c) an explanation as to why the contravention occurred;
 - (d) a legal land description of the location of the contravention;
 - (e) the name of the registered owner or owners of the parcel of land on which the contravention occurred;
 - (f) a summary of all measures and actions that were taken to mitigate any effects of the contravention;
 - (g) the Registration or Notification number provided by the Director for the compost facility, and the name of the person who held the Registration or Notification number at the time when the contravention occurred;
 - (h) the names, addresses, telephone numbers and job titles of all persons operating, managing or in control of the site at the time that the contravention occurred;
 - (i) a summary of proposed measures that will prevent future contraventions including a schedule of implementation for those measures;
 - (j) any information that was maintained or recorded under this Code of Practice, as a result of the contravention; and
 - (k) any other information required by the Director in writing.

(5) Annual Report

- (1) During each year of operation of a compost facility, the person responsible for a Class I or Class II Compost Facility shall prepare an Annual Report for the facility covering the calendar year reported on.
- (2) The person responsible for a Class I or Class II Compost Facility shall place the Annual Report in the Operating Record by March 31 of the year following the year on which the report is based.
- (3) The Annual Report shall contain, at a minimum, the following information:

- i. A summary of changes the person responsible or certified operators during the year;
- ii. updated personnel training log;
- iii. a summary of any changes made to the operations plan, nuisance plan, facility design plan, soil conservation plan, fire prevention and control plan, nuisance management plan, and odour management plan;
- iv. for Class I Compost Facilities a summary of any changes to groundwater monitoring program;
- v. the types and quantities of feedstocks processed at the composting facility;
- vi. the amount of compost permanently removed from the facility or used on site;
- vii. with respect to finished compost or vermicompost produced during the year:
 - a. records demonstrating pathogen reduction; and
 - b. copies of analytical reports of finished compost or vermicompost samples collected and analyzed pursuant to section 10(6) or 10(7).
- viii. the following environmental monitoring records and their interpretations:
 - a. process water monitoring;
 - b. for Class I Compost Facilities a table or graphical presentation of yearly groundwater monitoring records;
 - c. quality and quantity of process water removed from the composting facility for irrigation or disposal; and,
 - d. quality and quantity of sediments removed from the composting facility retention pond for land application or disposal.
- ix. any remedial actions taken;
- x. a summary of non-compliance issues;
- xi. a summary of nuisance management issues;
- xii. a summary of complaints received, and the action or actions taken as a result of the complaints; and
- xiii. for Class I Compost Facilities, a summary of adjustments made during the year to financial security, if applicable.

(6) Record Keeping

- (1) The person responsible for a Class I or Class II Compost Facility shall immediately provide any records, reports, documents, or data required to be created under this Code of Practice to the Director, or a representative of the Director, upon request.
- (2) The person responsible for a Class I or Class II Compost Facility shall record and retain all the following information regarding each contravention of this Code of Practice or complaints from the facility for a minimum of 5 years pursuant to Section 39 of the Waste Control Regulation:
 - (a) the place, date and time of the contravention/complaint;
 - (b) the name, and address of the contravention/complainant;
 - (c) the nature of the contravention/complaint; and
 - (d) a description of the contingency plan implemented.

FINAL CLOSURE

12 (1) Final Closure Plan

- (1) The person responsible for a Class I or Class II Compost Facility shall notify the Director in writing of the closure of the composting facility by submitting a Final Closure Plan within six calendar months after the final acceptance of feedstock at the compost facility.
- (2) The Final Closure Plan shall include, at a minimum, the following:
 - (a) schedule for completion;
 - (b) description of the final use of the closed areas;
 - (c) description of site restoration procedures, including:
 - i. drainage;
 - ii. soil replacement;
 - iii. erosion control; and
 - iv. revegetation, where applicable;
 - (d) compost removal;
 - (e) waste disposal;
 - (f) maintenance and operations of contaminant monitoring systems until performance measures are met for soil and groundwater, if applicable, for Class I Compost Facilities.
 - (g) The Final Closure Plan shall be implemented in accordance with a written authorization of the Director.

(2) Final Closure Report

- (1) The person responsible for a Class I or Class II Compost Facility shall file a copy of the Final Closure Report in the Operating Record for the calendar year in which Final Closure will be complete.
- (2) The Final Closure Report shall include, at a minimum, the following:
 - (a) the date of completion of the final closure;
 - (b) a statement including supporting evidence that the final closure has been completed in accordance with the final closure plan;
 - (c) a description of any deviations to the final closure plan and the reasons for the deviations; and
 - (d) a description of how the following elements (if applicable) have been, or will be dealt with
 - i. the final use of the closed areas;
 - ii. drainage restoration;
 - iii. soil replacement;
 - iv. erosion control; and
 - v. re-vegetation.

- (e) a groundwater report with supporting evidence to show that groundwater has not been contaminated for a Class I Compost Facility.

TRANSITION FOR EXISTING FACILITIES

13(1) Compliance Schedule for Existing Compost Facilities

Pursuant to this Code of Practice, the compliance schedule outlined in Schedule 1 of this Code shall apply to existing Class I and Class II Compost Facilities unless another compliance date is specified in writing by the Director.

CODE AMENDMENT

- 14 (1)** This Code of Practice will be reviewed every 5 years beginning in 2025. Alberta Environment and Parks will accept and compile written comments on the contents of this Code of Practice at any time and will review all comments received at the next review.

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SCHEDULE 1

| Sections of the Code of Practice | Applicable Compost Facility | Compliance Date |
|---|---|--|
| Section 5(1)(2) (a)(i) through (xvi) | Class I Compost Facilities | 12 months after coming into force date of this Code of Practice |
| Sections 5(3)(1) and 5(3)(2) | Class I Compost Facilities | 12 months after coming into force date of this Code of Practice |
| Sections 5(3)(1) | Class II Compost Facilities | 12 months after coming into force date of this Code of Practice |
| Section 5(8) | Class I Compost Facility | Affected Class I Compost facility owners will receive a written notice from the Director |
| Sections 9(1) through 9(15) | Class I and II Compost Facilities | 12 months after coming into force date of this Code of Practice |
| Sections 10(1),10(4),10(5), and 10(6) | Class I and II Compost Facilities | 12 months after coming into force date of this Code of Practice |
| Section 5(6),10(2) and 10(3) | Class I Compost Facilities with groundwater monitoring well(s) already installed on-site. | 12 months after coming into force date of this Code of Practice |
| Section 5(6), 8(6), 10(2) and 10(3) | Class I Compost Facilities without groundwater monitoring well(s) already installed on-site | 24 months after coming into force date of this Code of Practice |
| Section 11(1) to 11(6) | Class I and II Compost Facilities | 12 months after coming into force date of this Code of Practice |
| Sections 12(1) and 12(2) | Class I and II Compost Facilities | 12 months after coming into force date of this Code of Practice |

APPENDIX A COMPOST FACILITY CHECKLIST

The following information is to be submitted with a registration or notification form

The purpose of this checklist is to ensure the person responsible for the siting and construction of a newly proposed or expanding compost facility has taken the necessary measures to suitably locate the facility according to the most recent version of the Code of Practice for Compost Facilities, published by Alberta Environment and Parks as amended. This includes consultation with municipal planning staff regarding planning and development approvals.

NOTE: This checklist is not intended for compost facilities that are proposed at landfills or wastewater treatment plants where land use is already designated.

1. Name of the proposed facility_____
2. Name of applicant: _____
3. Address: _____
4. Email: _____
5. Phone number: _____
6. Project Location: _____
7. Legal Land Description: _____
8. Facility Street Address: _____
9. Parcel Size: _____
10. Tentative Facility Construction Start date: _____
11. Start up Date: _____
12. List any provincial registrations, approvals or municipal permits that will be needed for your proposal, e.g. Compost facility registration, development permit, roadside development permit, etc. and provide the names of local officials you are working with. If you need more space please attach a separate sheet.
 Permit: _____
 Officer/Planner's Name: _____
 Permit: _____
 Officer/Planner's Name: _____
13. Attach a site plan, vicinity map, and/or topographic map of the proposed location, if reasonably available.
14. How much land (hectares) will be leased/purchased for your proposal?
15. How much of that land will be used by the compost facility (facility footprint)? If possible, please provide the size of the area designated for receiving, processing, curing, retention pond, and buffer zones.

16. Give a brief description of the type and maximum annual quantity of organic materials that will be composted at this facility. Please included all primary feedstocks and amendments.
17. Does this facility require financial security in accordance with Part 4, section 27 - 33 of the Waste Control Regulation?
 - a. Yes No
18. Do you plan on doing a public consultation?
 - a. Yes No
 - b. If yes, please describe.
19. What general types of soils are found on the site (for example, clay, sand, gravel, peat)?
20. What is the current use of the site?
21. What is the current land use designation of the site?
22. Is the facility within 450 metres from schools, residential housing, hospitals, or food establishments?
 - a. Yes No
23. Identify existing roads or highways serving the site. Show on-site plans, if any.
24. Permits are required if the facility is within 300 metres of a highway and 800 metres of an intersection of a controlled highway.
25. What designated and informal recreational opportunities are in the immediate vicinity?
26. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, rivers, lakes, ponds, wetlands)?
 - a. If yes, describe the type and provide names (if applicable).
27. Will the project require any work within 30 metres of the described bodies of water?
 - a. If yes, please describe
28. Is there a drinking water well within 450 metres from the site?
 - a. Yes No
29. Does the proposed compost facility located within a 100-year floodplain? *Flood risk maps are available from Alberta Environment and Parks.*
 - a. If yes, note the location on the site plan.
30. Will any wastewater be discharged to surrounding land?
31. If so, please provide a general description and indicate the area on the site plan.

32. How deep is the seasonal high water table from the surface?

33. Have you included the information required in Section 5 of this Code of Practice?

- a. Yes No

The above answers are true and complete to the best of my knowledge.

Print Name: _____ Signature: _____

Date: _____

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APPENDIX B Registration Application Form for Class I Compost Facility

1. General Information

Applicant Name

Mailing Address

Legal Land Description for compost facility

Contact Person

Phone Number

E-mail address

1. Maximum Annual Facility Capacity

What is the maximum annual quantity of feedstocks and amendments that will be accepted at this facility?

2. Technical Information

Please provide the following information as specified in this Code of Practice:

- (a) a compost facility checklist;
- (b) a facility design plan and specifications;
- (c) a soil conservation plan;
- (d) an operations plan;
- (e) fire prevention and control plan;
- (f) nuisance management plan;
- (g) an odour management plan;
- (h) a groundwater monitoring program; and
- (i) a background groundwater quality report.

3. Deviations from Code of Practice

Are you requesting deviations from the Code of Practice for Compost Facilities for environmental setbacks, design, and construction, feedstock accepted, or environmental monitoring?

Yes No

If yes, please fill in section below:

| Requested deviation | Yes | No |
|---|--------------------------|--------------------------|
| Environmental setbacks | <input type="checkbox"/> | <input type="checkbox"/> |
| Facility construction, design plan and specifications | <input type="checkbox"/> | <input type="checkbox"/> |
| Facility liner | <input type="checkbox"/> | <input type="checkbox"/> |
| Retention pond liner | <input type="checkbox"/> | <input type="checkbox"/> |
| Feedstock List | <input type="checkbox"/> | <input type="checkbox"/> |

| | | |
|---|--------------------------|--------------------------|
| Environmental monitoring: Sampling and analytical methods | <input type="checkbox"/> | <input type="checkbox"/> |
| Environmental monitoring: Groundwater monitoring | <input type="checkbox"/> | <input type="checkbox"/> |
| Environmental monitoring: Odour monitoring | <input type="checkbox"/> | <input type="checkbox"/> |

Note: Director authorization is required prior to deviating from the Code of Practice for Compost Facilities.

4. Other Information

Please contact your regional Alberta Environment and Parks office to determine what additional information needs to be added to your application.

Please provide:

- (a) Where appropriate, a copy of the field approval issued under section of the *Public Lands Act*.
- (b) The rationale for the compost facility, in writing.

I acknowledge that I have reviewed a copy of the Code of Practice for Compost Facilities and that I am bound by the provisions of the Code of Practice and any subsequent amendments to it.

Applicant Signature: _____ Date: _____

Date received:

Registered by:

Director's Signature _____ Date: _____

APPENDIX C Notification Form for Class II Composting Facilities

1. General Information

Applicant Name

Mailing Address

Legal Land Description for compost facility

Contact Person

Phone Number

E-mail address

2. Maximum Annual Facility Capacity

What is the maximum annual quantity of feedstocks and amendments that will be accepted at this facility?

3. Technical Information

Please provide the following information as specified in this Code of Practice:

- (a) a compost facility checklist;
- (b) a facility design plan and specifications;
- (c) a soil conservation plan;
- (d) an operations plan;
- (e) fire prevention and control plan;
- (f) nuisance management plan;
- (g) an odour management plan;

4. Deviations from Code of Practice

Are you requesting deviations from the Code of Practice for Compost Facilities for environmental setbacks, design, and construction, or environmental monitoring? Yes No

If yes, please fill in section below:

| Requested deviation | Yes | No |
|---|--------------------------|--------------------------|
| Environmental setbacks | <input type="checkbox"/> | <input type="checkbox"/> |
| Facility construction, design plan, and specifications | <input type="checkbox"/> | <input type="checkbox"/> |
| Facility liner | <input type="checkbox"/> | <input type="checkbox"/> |
| Retention pond liner | <input type="checkbox"/> | <input type="checkbox"/> |
| Environmental monitoring: Sampling and analytical methods | <input type="checkbox"/> | <input type="checkbox"/> |
| Environmental monitoring: Odour monitoring | <input type="checkbox"/> | <input type="checkbox"/> |

Note: Director authorization is required prior to deviating from the Code of Practice for Compost Facilities.

2. Other Information

Please contact your regional Alberta Environment and Parks office to determine what additional information needs to be added to your application.

Please provide:

- (a) Where appropriate, a copy of the field approval issued under section of the *Public Lands Act*
- (b) The rationale for the compost facility, in writing.

I acknowledge that I have reviewed a copy of the Code of Practice for Compost Facilities, and that I am bound by the provisions of the Code of Practice and any subsequent amendments to it.

Applicant Signature: _____ Date: _____

Date received:

Notification received by:

Director's Signature _____ Date: _____

