

Alberta Odour Complaints Overview

**prepared for
Clean Air Strategic Alliance
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Introduction

Over the past few months, the Complaints Task Group (a subgroup of CASA's Odour Management Team) solicited presentations from regulatory agencies, facility operators, and municipalities that deal with odour complaints in Alberta.

The goal of this survey is to create a concise overview of the current mechanisms in place to manage odour complaints in our province. Where do odour complaints come from? Who receives the complaint, and what information do they collect? How do groups assess complaints, what steps do they take to resolve them, and how do they follow up with complainants?

Invitees were asked to organize their presentations around twelve questions from the working group:

1. How many odour complaints do you receive (weekly, monthly, annually) including the most frequent times of day, night and season?
2. How do you receive complaints? (e.g., by phone, via Twitter)
3. Who has the initial contact with the complainant and what are their qualifications? (e.g., who answers the telephone)
4. What information do you collect from the complainant?
 - What descriptors do you use to help categorize odours?
5. How do you determine the appropriate response to a complaint?
6. What tools are used to investigate complaints?
 - How do you assess odours (e.g., rotten eggs) during an investigation?
7. How do you document your process, including:
 - a. Information recorded from the complainant
 - b. Complaint investigation
 - c. Response to investigation and follow-up with complainant
8. Do you track complaint data? If so, how? (e.g., by number of complaints, source)
 - Do you conduct any analysis of complaint data? If so, who does the analysis?
9. Does your process require that you share complaint information with other agencies/partners? If so:
 - a. Which agencies/partners and what type of information?
 - b. How is this information shared?

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- c. Is FOIP an issue with respect to release of information and confidentiality?
10. What are the timelines associated with your process (from a complaint being received to final follow-up with complainant)?
 11. What lessons learned can you share about your process?
 12. Do you have any tools/policies/forms related to your process that you can share?

Report structure

This report consolidates the information presented to the Complaints Task Group, and organizes it in three main sections:

Section 1: An overview of the information, organized around the working group's twelve questions to presenters. Each question is followed by summaries from only those presentations that included pertinent information in that area.

Section 2: Another overview of the information, organized according to presenter.

Section 3: An appendix of supporting documents supplied by the presenters.

Section 1:

Information overview, by question

Question 1:

How many odour complaints do you receive (weekly, monthly, annually) including the most frequent times of day, night and season?

Not all respondents keep track of the number of odour complaints they receive. Only a few analyze complaints to find the most frequent times of day, or of year.

Alberta Airsheds Council (AAC) reported that airsheds have a relatively informal process for handling odour complaints. They reported that their members (nine airshed zones) each receive anywhere from 0–60 odour complaints per year.

Alberta Association of Municipal Districts and Counties (AAMDC) distributed a brief survey to its members, and 36 of 69 municipal districts and counties responded. Most AAMDC members rarely receive odour complaints—they cite numbers ranging from 20 per year to one odour complaint in the previous 12 years.

Alberta Energy Regulator (AER) received 373 odour complaints in 2010, 386 in 2011, 489 in 2012, and 388 in 2013. They do not break down their data by time of day or season.

Alberta Environment and Sustainable Resource Development (AESRD) received about 10,000 calls at its Coordination of Information Centre (CIC) in 2013, of which 519 were related to odour. In addition to the Natural Resources Conservation Board (NRCB) and the Alberta Energy Regulator (AER), which made their own presentations to CASA's odour working group, the CIC services the Alberta Environment Support and Emergency Response Team, Alberta Environment and Sustainable Resource Development, and Alberta Transportation.

Edmonton Waste Management Centre (EWMC) reported 783 odour complaints received citywide through the City of Edmonton's 311 service. Not all of these complaints relate to the EWMC or Goldbar Wastewater Plant. 46 percent of odour calls are in July and August, with 51 percent between 6 and 10 p.m.

Environmental Public Health (EPH) does not track the specific number of odour complaints (the term it uses is "service requests") it receives. Service requests include situations involving both indoor and outdoor air quality.

Hinton Pulp received 58 odour complaints in 2013, 96 in 2012, 58 in 2011, and 28 in 2010. Most complaints occur during the summer, when people are more likely to be outdoors and to have their windows open. They also occur mostly during normal waking hours.

Natural Resources Conservation Board (NRCB) reported receiving "hundreds of complaints each year." (They presented a bar graph indicating numbers between 200 and

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350 annually over the past five years.) NRCB receives its highest number of complaints in the spring and fall. Most complaints relate to odours from barns and lagoons, or from manure spreading.

Oil and gas sector — Conventional operations receive few odour complaints directly. Most complaints go directly to the Alberta Energy Regulator (AER; see above).

Transportation sector — Altex Energy occasionally receives one or two odour-related complaints, usually during loading; however, there's no regular pattern to their frequency. Some facilities receive daily complaints, while others have never received a complaint. The company also sometimes receives complaints when the facility is not operating.

Question 2:

How do you receive complaints? (e.g., by phone, via Twitter)

Phone calls remain by far the most common way odour complaints are received in Alberta. None of the presenters currently solicit complaints via Twitter. One organization has developed a web app, accessible by mobile devices, which enables users to report odours.

Alberta Airsheds Council (AAC) — Airshed zones receive complaints through a number of different methods:

- Website/email
- Hard copy/observation card reporting
- WBEA's Fort McMurray Odour Project web app (odoview.com/wbea/)
- Telephone
- Walk-ins

Alberta Association of Municipal Districts and Counties (AAMDC) did not specify how their members generally receive complaints.

Alberta Energy Regulator (AER) receives complaints via the Energy and Environmental 24-hour Response Line: 1-800-222-6514. This number connects callers to Alberta Transportation's **Co-ordination and Information Centre (CIC)**.

Alberta Environment and Sustainable Resource Development (AESRD) receives the vast majority of its complaints via the CIC's 1-800-222-6514 response line, but do receive about 15 emails per year from industry who are self-reporting. The same procedures apply to both calls and emails.

Edmonton Waste Management Centre (EWMC) — The City of Edmonton has a 311 hotline where residents can call to report odour complaints (along with any other concerns relating to the city, from potholes to the arena decision). The EWMC also receives some complaints by email, regular mail, and in person.

Environmental Public Health (EPH) receives some calls forwarded from Health Link Alberta. The EPH also receives direct calls, emails, and walk-ins, as well as referrals from other agencies and municipalities.

Hinton Pulp receives its odour complaints (which it calls "public inquiries") via its Main Gate phone number, which is staffed 24/7. It regularly advertises the number in both local papers.

Natural Resources Conservation Board (NRCB) — NRCB's 24-hour complaints line connects to a dedicated line in ESRD's **Co-ordination and Information Centre (CIC)**. Callers also sometimes contact an office or an inspector directly.

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Oil and gas sector — Odour complaints made directly to operators typically arrive by phone. Complaints may also be relayed to companies via AESRD.

Transportation sector (Altex Energy) — Altex has no formal complaint process. It receives complaints by phone and deals with them on a case-by-case basis.

Question 3:

Who has the initial contact with the complainant and what are their qualifications? (e.g., who answers the telephone)?

With well-educated, specially trained and experienced Compliance Officers, CIC (run by Alberta Transportation) services Alberta Environment Support and Emergency Response Team, the Natural Resources Conservation Board, the Alberta Energy Regulator, Alberta Environment and Sustainable Resource Development as well as Alberta Transportation. It is the province's most qualified call centre when it comes to handling odour complaints. Although some of the other presenters don't require specific qualifications for the people who receive complaints, most recognize the importance of training.

Alberta Airsheds Council (AAC) — The initial contact varies from zone to zone. A program manager, executive director, or somebody else in the administration may take a complaint. Board members or technical working group members may also provide informal responses.

Alberta Energy Regulator (AER) — A team of ten Compliance Officers, working in shifts, operates the CIC 24 hours a day. Compliance Officers are required to have a Bachelor of Science (preferably in chemistry or environment science) plus at least two years of related experience (or equivalent). They also receive about 18 months of on-the-job training.

Alberta Environment and Sustainable Resource Development (AESRD) operates the CIC (see AER response, above).

Edmonton Waste Management Centre (EWMC) — The initial contact is a general 311 operator. If an odour complaint relates to the EWMC, it is forwarded to assigned staff/consultants at the drainage branch, the EWMC, and Goldbar.

Environmental Public Health (EPH) — Calls received at Health Link Alberta are answered by trained nurses. At the EPH, receptionists are trained to collect basic information from callers before assigning the request to the appropriate PHI. PHIs also field direct calls.

Hinton Pulp — odour complaints are received by phone at the main gate. The employee who takes the call fills out a public inquiry form (see appendix) before redirecting the call elsewhere in the company for investigation and response.

Natural Resources Conservation Board (NRCB) — NRCB's calls are answered at the CIC (see above). Once the call sheet has been passed on to NRCB, the assigned inspector becomes the primary contact for the complaint.

Oil and gas sector — If an odour complaint does come in directly, the process is very informal. An administrator may take the call, or it could go through to a field staff

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member. If the call goes to an administrator, the information is recorded in a log book; otherwise, the complaint is simply dealt with as part of regular operations.

Some odour complaints go through the AESRD hotline at the CIC. Companies may also call the AESRD hotline proactively if they anticipate potential odour problems; for example, because of an emergency upset or a planned process.

Companies sometimes also call the AESRD hotline proactively if they anticipate potential odour problems; for example, because of an emergency upset or a planned process.

Transportation sector (Altex Energy) — The initial contact is the facility manager, who has 20 years in the transportation industry.

Question 4:

What information do you collect from the complainant?

- **What descriptors do you use to help categorize odours?**

All of the presenters collect basic information—names (if provided), location of the problem, description of the odour and its strength. Some presenters specifically categorize odours to help with complaint triage and troubleshooting.

Alberta Airsheds Council (AAC) — Most Airshed Zones have an informal documentation process ... a ‘conversation’ takes place between the airshed responder and the complainant.

Those airsheds with a formal process record the following information:

- the caller’s current physical state (healthy or sick)
- meteorological conditions at the time (cloudy, rainy etc.)
- wind conditions (windy, calm etc.)
- type of odour perceived (e.g., asphalt, rotten egg, natural gas, etc.).
- intensity of odour perceived (high, weak, etc.).
- characterization of the perceived odour (pleasant, unpleasant etc.)
- location where odour was encountered.

Alberta Energy Regulator (AER) — CIC Compliance Officers obtain as much information as they can from a complainant. The CIC procedure guide outlines the minimum information needed:

- Caller’s name (unless they wish to remain anonymous).
- Mailing address (if the caller is a member of the public).
- Phone number (immediate contact number if it is an emergency; otherwise daytime number).
- The subject matter of the call (as much detail as possible; try to record in the caller’s words).
- Location of the event (address, legal subdivision, nearest community or description of location).

Odour complaints broken down by chemical: H₂S (“rotten egg” smell), THC (petroleum smell, tar or oily smelling), SO₂ (burnt matches or industrial smelling) and “other.”

AER staff have the option of using a field surveillance inspection system (FIS) form to assist with entering the complaint into the database.

Alberta Environment and Sustainable Resource Development (AESRD) — While there is not a specific ESRD form for odour complaints, callers are asked to identify the

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source of the odour if they can (e.g., sour gas), rate the odour from 1–10, and to provide the time of day they noticed the odour.

Edmonton Waste Management Centre (EWMC) — Callers to 311 are asked for their contact information (for callback and investigation), and are asked to describe the odour and its strength (usually described as very high).

EWMC uses an “odour wheel” (see appendix) to help describe and classify odours.

Environmental Public Health (EPH) — Callers are asked for their personal contact information, the origin or location of the odour, and the odour’s description, frequency, and intensity.

Hinton Pulp — When a complaint call is received, the employee fills out an “environmental public inquiry form” (see appendix). Hinton Pulp uses the following descriptors for troubleshooting:

- Really bad smell (skunk)
- Rotten egg smell
- Rotten vegetable
- Rotten cabbage

Natural Resources Conservation Board (NRCB) — The CIC records details of each complaint in its complaint response log,” with odour complaints also requiring completion of the “Odour Report Form.” The form is faxed to NRCB’s Red Deer office within 15 minutes, with hard copies sent by GoA courier the next working day.

Oil and gas sector — If a company administrator takes the complaint call, the log entry will include the date and time of the call, contact information for the complainant, the location of the odour, and any additional comments (e.g., description of the odour, weather conditions).

Transportation sector (Altex Energy) — The Altex facility manager collects the following:

- name
- phone number
- description of the odour
- location odour was detected

Question 5:

How do you determine the appropriate response to a complaint?

The CIC (and the agencies that rely on it) have a specific protocol to rate the urgency of each call, from 1–3, with specific responses laid out for each level. Some presenters have their own systems for complaint triage, while others evaluate complaints case by case.

Alberta Airsheds Council (AAC) — There is no overall formal policy. Airshed zones often refer complainants to the CIC’s 1-800 number.

Alberta Association of Municipal Districts and Counties (AAMDC) — Municipalities examine complaints as they are submitted and determine how they should be addressed.

Alberta Energy Regulator (AER) — The Compliance Officer uses the complaint details (such as the source, adverse effect, and time sensitivity) to triage the complaint (on a scale from 1–3) and determine an appropriate response. The officer then transfers the complaint directly to an AER representative to handle (via e-mail or phone transfer), or forwards the details to an AER staff member for response during business hours. All complaints determined to be within the jurisdiction of the AER are inspected/investigated.

Alberta Environment and Sustainable Resource Development (AESRD) — Not every odour call that comes in gets an investigation. They all get a callback, but a formal investigation depends on the ability to determine what the odour is, where it’s coming from, etc.

The Compliance Officer uses information collected from the caller to help triage the complaint. This can sometimes prove difficult because “offensive” is subjective (“it stinks” does not constitute an offense. An Environmental Protection Order can be issued due to odour, but this step must be based on evidence. Urgent complaints (e.g., gas leaks) are referred to the Emergency Response Team. If the complaint is not an emergency, the officer emails the local AESRD office or to the on-call Regional Compliance Manager. If the complaint was referred to the on-call Compliance Manager, he or she must contact the CIC by phone within 15 minutes to confirm receiving the email.

Edmonton Waste Management Centre (EWMC) — A community or on-site odour survey can be triggered by two or more 311 calls relating to EWMC or Goldbar in a six-hour period, by one call from ESRD, or at the discretion of an Edmonton odour representative (for example, a proactive survey if a planned activity may cause odour concerns).

Environmental Public Health (EPH) — In the case of odour complaints, EPH’s response protocol is currently rather informal. An inspector will generally call the complainant for more details of the problem.

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Hinton Pulp responds to every odour complaint according to its defined “Public Inquiry Process” (see appendix).

Natural Resources Conservation Board (NRCB) investigates each odour complaint. Some issues can be resolved by calling operators to check what types of activities are going on. At other times, an NRCB investigator visits operations and checks for permit compliance.

Oil and gas sector — When a complaint arrives directly at a company, it is passed on to a responder who follows up by checking to see if an odour can be detected—and, if so, records the location, the odour’s description and intensity, and the weather conditions. The operator checks facilities to identify issues, and reports on any corrective actions taken.

If the CIC receives an odour complaint for the Wood Buffalo area, the compliance officer assesses it to decide whether or not to initiate the WBEA odour protocol. The officer checks the meteorological and live air-monitoring data from the WBEA, and initiates the protocol if the data indicate that odour may be a problem. The protocol is also initiated if the CIC receives two or more odour complaints about the same issue.

If the situation warrants, the AESRD identifies the zone (or zones) in which the protocol will be activated, and calls industry members in those zones to have them activate their protocols.

Each industry member checks its facilities to determine if it could be the source of the odour. Within one hour, it reports back to the CIC with its facility status, and whether any recent events may have caused the odour problem. As long as the protocol remains activated, industry members must report any changes in the status of their facilities.

If those initial reports fail to identify a source for the odour, industry representatives continue their efforts.

Transportation sector (Altex Energy) — Altex determines its response case-by-case.

Question 6:

What tools are used to investigate complaints?

- **How do you assess odours (e.g., rotten eggs) during an investigation?**

Many of the presenters have high-tech air monitoring equipment to help them detect and quantify specific pollutants, while for others the inspector's nose remains the primary diagnostic tool. EWMC uses a specially designed "odour wheel" to help people describe odours more precisely.

Alberta Airsheds Council (AAC) — Airshed zones don't currently conduct formal investigations for odour complaints.

Alberta Association of Municipal Districts and Counties (AAMDC) — Many rural municipalities do not have municipal bylaws in place to address odour issues specifically, but instead handle complaints on an issue-by-issue basis or deal with them under another municipal bylaw (e.g., nuisance, land-use).

If a municipal bylaw is in place, a peace officer or bylaw enforcement officer handles the issue. Some AAMDC members also indicated that the chief administrative officer responds to complaint issues if there is no enforceable bylaw in place.

Municipal fire departments investigate complaints regarding natural gas and refer to the appropriate agencies as required. If the odour is from an unknown source, the Government of Alberta might become involved.

Depending on the nature of the complaint, investigation or enforcement may be referred to an external party. For example, if the complaint applies directly to a confined feeding operation, the municipality redirects the complaint to the NRCB as the regulatory body. Complaints relating to energy development are directed to the AER.

Alberta Energy Regulator (AER) investigates complaints with the following tools:

- Inspector training and knowledge
- Industry operators
- Ambient air-monitoring station data
- Mobile air-monitoring unit
- FLIR Camera: Infra-red detection principle
- Photoionization Detector (PID)
- Portable ambient air analyzer (GASMET DX4040 FTIR)

AER staff attempt to verify a source and determine a responsible party. They conduct an inspection to determine a possible source (or sources). AER applies enforcement if a noncompliance is verified.

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Alberta Environment and Sustainable Resource Development (AESRD) — The AESRD investigates odour complaints using air monitoring trailers, air canisters, and its mobile air-monitoring laboratory. It specifically analyzes samples for priority pollutants: NO_x, H₂S, NH₃, O₂, THC, TRS, and BETX.

Edmonton Waste Management Centre (EWMC) — In addition to “staff with trained noses” and its specially designed “odour wheel” (see appendix), EWMC uses an array of electronic tools including Odowatch e-noses.

Environmental Public Health (EPH) — The problem may be evaluated simply by nose, because EPH has limited monitoring equipment. In some cases, an inspector will request assistance from AESRD and its mobile air-monitoring laboratory.

Hinton Pulp uses the description of the odour to help pinpoint possible causes. The shift engineer and mill co-ordinator then implement the “Odour Complaints Checks” list to troubleshoot and resolve the problem.

Natural Resources Conservation Board (NRCB) — The NRCB uses a response matrix (see appendix) to guide its investigations.

Oil and gas sector — If the WBEA odour protocol is activated, and companies in the affected zones cannot determine the source of the odour, AESRD may ask WBEA to send out its mobile monitoring laboratory. AESRD might also initiate other investigations of the odour source during the event.

Transportation sector (Altex Energy) — Altex checks local airshed information for wind speed and direction, as well as the facility operations schedule. If necessary, the facility manager checks for leaks onsite using detector tubes, etc.

Question 7:

How do you document your process, including:

- a. Information recorded from the complainant
- b. Complaint investigation
- c. Response to investigation and follow-up with complainant

Most presenters recognize the importance of documenting complaints from start to finish. Again, the CIC has the most sophisticated documentation system.

Alberta Airsheds Council (AAC) — Airshed zones often use a simple complaints log to document the process. In cases where an airshed zone acts as a conduit between a complainant and another agency or operator, it conducts a bilateral follow-up.

Alberta Energy Regulator (AER) — Findings of any investigation or inspection are entered into the field inspection system form (FIS), with the data linked to the complaint. If multiple sites are investigated after an incident, their data is linked.

The AER advises complainants (unless they're anonymous) of the investigation results. The investigator documents this follow-up conversation in the comment section of the FIS. At one time, the AER conducted a monthly random callback survey to track satisfaction with its complaint response.

Alberta Environment and Sustainable Resource Development (AESRD) — The CIC refers complaints to the appropriate agencies for investigation. As the inspectors collect information, they enter it into the CIC's online form, in order to keep all information in one place.

Edmonton Waste Management Centre (EWMC) — Community liaisons can record data using an online record-keeping tool. Most complainants receive a follow-up phone call, particularly if they specifically request one.

Environmental Public Health (EPH) — The Public Health Inspector logs every action on the request, and inputs the information into a data management system.

Hinton Pulp — Once the investigation is complete, the paperwork is distributed and filed. A copy is sent to the Technical Department, where a staff member provides a follow-up call to the inquirer.

Natural Resources Conservation Board (NRCB) — Data from the Odour Report Form is entered into an NRCB database and the case is assigned an inspector. NRCB also documents in its database all actions relating to each investigation. Anyone at NRCB can access this data. NRCB is not able to issue fines. The NRCB sometimes has to seek a court order if an operator refuses access to the site in question. Prosecution is used only as a last resort; it is costly and lengthy.

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Oil and gas sector — If the investigation has gone through the WBEA, the AESRD deactivates the Wood Buffalo odour protocol once the issue has been resolved. All of the industry members in the activated zones submit a seven-day report to AESRD and WBEA. The reports are reviewed at the WBEA quarterly meetings, to discuss any lessons learned.

Transportation sector (Altex Energy) —No formal procedures or documentation is in place.

Question 8:

Do you track complaint data? If so, how? (e.g., by number of complaints, source)?

- **Do you conduct any analysis of complaint data? If so, who does the analysis**

Most presenters collect and track data, although few agencies perform detailed analysis of that data.

Alberta Airsheds Council (AAC) — Airshed zones generally track odour complaints on a one-off basis. They do collect requests to monitor air quality, but do not yet have any formal tracking system. They track odour complaints by date, time, and location, using an Excel spreadsheet. The Wood Buffalo Environmental Association's odour project does involve some temporal/spatial analysis.

Alberta Energy Regulator (AER) conducts some analysis of its complaint data. Its annual report, available to all stakeholders, looks for trends from the previous year. Some data is reflected in monthly internal reports, which are reviewed by AER management and forwarded to the Minister of Energy. Additional analysis and in-depth studies are conducted as needed.

Alberta Environment and Sustainable Resource Development (AESRD) tracks its data through its online form. This data can be sorted in various ways, but data is not otherwise routinely analyzed. CIC staff informally track clusters of calls on a whiteboard.

Edmonton Waste Management Centre (EWMC) tracks the total number of odour calls per year, dating back to about 1999. It also breaks down the number of complaints by month, by days of the week, and by hours of the day.

Environmental Public Health (EPH) — Every service request is tracked in data management systems. AHS is working towards having one data system for all its zones.

Hinton Pulp reviewed its public inquiry data back to January 2010, in conjunction with Stantec. The analysis looked for patterns related to time of year, time of day, and wind and weather conditions.

Natural Resources Conservation Board (NRCB) tracks the number of odour complaints received each year, alongside the number of operations. The CIC stores the data entered in electronic call sheets in an active SharePoint site for one month, and then automatically relocates the call sheets to an archive site. Paper call sheets are stored for two years (the statute of limitation for environmental charges). On several occasions, odour complaints have been analyzed for specific purposes by NRCB or Agriculture and Rural Development.

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Transportation sector (Altex Energy) — No formal procedures or documentation is in place. Altex plans to eventually develop policies and forms to help them track data.

Question 9:

Does your process require that you share complaint information with other agencies/partners? If so:

- a. Which agencies/partners and what type of information?**
- b. How is this information shared?**
- c. Is FOIP an issue with respect to release of information and confidentiality?**

Most agencies give complainants the option to remain anonymous, and none share the identities of their callers without their permission. A few agencies have agreements to share information with partner organizations under certain specific circumstances.

Alberta Airsheds Council (AAC) — Policies vary from zone to zone. Complaints are mentioned at Technical Working Group meetings, but no investigations are conducted. Names are not revealed at committee meetings. Some zones include a “release of name” checkbox in their documentation process.

Alberta Energy Regulator (AER) has no process to openly share complaint information with other agencies.

Under the Freedom of Information and Protection of Privacy Act (FOIPPA), the AER cannot release any personal information. Other agencies can submit FOIP requests with the AER FOIP Coordinator for information about compliance. AER incident information can also be purchased through Environment Information Sales.

Alberta Environment and Sustainable Resource Development (AESRD) has an agreement with Environment Canada that they will be contacted under certain circumstances (in terms of odours, the only one that might apply is “Release of contaminant to the air or water which may cross Alberta border”). Environment Canada links to other federal agencies as necessary.

Edmonton Waste Management Centre (EWMC) responds to any direct calls from ESRD. It also participates with a community liaison committee that meets every two months or so. The EWMC and Goldbar Wastewater Plant coordinate odour complaints because of some linkages between operations, and also because they share contracts with third-party odour consultants.

Environmental Public Health (EPH) — If the EPH determines that another agency has jurisdiction, or would be better able to respond, the complainant is directed to that agency. For example, a caller complaining about dust or odours from a feedlot would be referred to NRCB.

Caller identity is not shared with other agencies unless the caller gives permission.

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Hinton Pulp shares its numbers of public inquiries for odour with its own staff, through the monthly Environmental Summary, with the public advisory committee at bimonthly meetings, with Alberta Environment in a monthly air emissions report (in addition to the initial notification made within 24 hours of each complaint), and with the Town of Hinton upon request. The mill manager is also available for media inquiries.

Natural Resources Conservation Board (NRCB) — The NRCB keeps the identity of all complainants confidential. If the complaint is a multi-jurisdictional issue, NRCB shares information with the appropriate agencies.

Transportation sector (Altex Energy) — The industry is currently unregulated, so Altex is not required to report or share data. They have at times shared data with the Peace Airshed Zone Association (PAZA).

Question 10:

What are the timelines associated with your process (from a complaint being received to final follow-up with complainant)?

Every presenter recognizes the importance of responding as quickly as possible. Most try to follow up within 24 hours.

Alberta Airsheds Council (AAC) — Zones do their utmost to provide quick, meaningful and appropriate responses to odour complaints—generally within 24 hours. What constitutes a “final follow-up” varies widely from organization to organization.

Alberta Association of Municipal Districts and Counties (AAMDC) did not specify.

Alberta Energy Regulator (AER) response time varies based on triage, and based on the complexity of the investigation. Most complainants receive follow-up with investigation results within 24 hours.

Alberta Environment and Sustainable Resource Development (AESRD) has a protocol to get back to complainants within 24 hours. Often, they can provide immediate response.

Environmental Public Health (EPH) — A Public Health Inspector contacts each caller within 48 hours of the initial request (an urgent complaint can trigger a faster response).

Depending on the situation, a complaint is considered closed once the issue has been resolved to the best of everyone’s abilities. The time this takes can vary widely

Hinton Pulp did not specify, but its policies and procedures stress prompt action.

Natural Resources Conservation Board (NRCB) — Most investigations are completed in a few days, with a goal of no more than ten days. Very few go beyond 90 days.

Transportation sector (Altex Energy) — Altex tries to follow up complaints immediately.

Question 11:

What lessons learned can you share about your process?

Many presenters expressed a desire to build better awareness and engagement with their communities.

Alberta Airsheds Council (AAC) — A quick response is very important.

Members of the public often approach airshed zone organizations because they are concerned and motivated to find solutions.

The AAC would find it helpful to have a protocol developed, if only to help them properly direct complaints and decide what information they can openly share. The council would also benefit from a set of tools to help inform decisions around air quality and odour complaints.

Alberta Association of Municipal Districts and Counties (AAMDC) — It is important that municipalities engage with stakeholders, residents, regulatory bodies and neighbouring municipalities for land-use planning and positive development.

Agriculture is a key industry in rural areas, and agricultural odours come with the territory. By educating residents about what they can expect, and what they should be prepared to occasionally tolerate, municipalities can help curb odour complaints.

Residents should be educated about any odour management bylaws that are in place, and about when they should direct their complaints to regulatory bodies such as the NRCB. This will help establish better communication.

Edmonton Waste Management Centre (EWMC) provided the following list:

- It is important to practice due diligence in managing odours at the source.
- When odours occur, take appropriate action to correct them (within technical reality and practicality).
- Fixing odour problems doesn't happen instantly (sometimes we need engineered solutions).
- Put an odour plan in place, with actions to take when odour complaints occur, and when weather conditions (e.g., inversions) may cause odour problems.
- Have a plan to maintain good communications with the community
- Failure to properly address odour issues increases public angst.

Hinton Pulp has some frustration with calls that don't come directly to the company. Callers sometimes contact the Town of Hinton or Alberta Environment, and this can cause delays in the investigation and follow-up. Also, information passed through ESRD might be incomplete, or unhelpful (for example, stressing the intensity of an odour rather than its description, which would be more useful for troubleshooting).

CASA Odour Complaints Report

Natural Resources Conservation Board (NRCB) would like to increase awareness of their telephone number both with the public and within the GoA. They do not currently have the resources to perform educational outreach. They hope to further streamline their investigations to make the most of limited resources. They plan to develop an odour matrix, so that needn't rush out to investigate when an operation they know is doing a generally accepted practice (e.g., spreading, agitating a lagoon).

Transportation sector (Altex Energy) — Altex would like to build more engagement with the surrounding community.

Question 12:

Do you have any tools/policies/forms related to your process that you can share?

See appendix for a collection of forms, policies and tools shared by presenters.

Section 2:

Information overview, by presenter

Alberta Airsheds Council (AAC)

The AAC reported that most Alberta airshed zones have a relatively informal process for handling odour complaints. They often refer complainants to the correct agency (e.g., ESRD, industry). Airshed zones do not investigate complaints. In some cases, they may supply complainants with canisters for them to conduct sampling. Many people are satisfied with this outcome and subsequently don't feel the need to register a formal complaint with the regulator.

Alberta's airshed zones receive from 0–60 odour complaints or issues each per year. Some zones report a “high complaints frequency” season—typically the winter in most parts of Alberta for industrial odours and spring/fall for agricultural odours.

Zones receive complaints through a number of different methods:

- Website/email
- Hard copy/observation card reporting
- WBEA's Fort McMurray Odour Project web app (odoview.com/wbea/)
- Telephone
- Walk-ins

The initial contact varies from zone to zone. A program manager, executive director, or somebody else in the administration may take a complaint. Board members or technical working group members may also provide informal responses.

Most Airshed Zones have an informal documentation process ... a ‘conversation’ takes place between the airshed responder and the complainant.

Many airshed zones record odour complaints in a simple complaints log. Zones with a formal process record the following information:

- the caller's current physical state (healthy or sick)
- meteorological conditions at the time (cloudy, rainy, etc.)
- wind conditions (windy, calm, etc.)
- type of odour perceived (e.g., asphalt, rotten egg, natural gas, etc.).
- intensity of odour perceived (high, weak, etc.).
- characterization of the perceived odour (pleasant, unpleasant, etc.)
- location where odour was encountered.

When airsheds receive odour complaints, they respond in various ways:

- They often refer complainants to the CIC, because airshed zones do not investigate incidents or enforce regulations.
- They direct complainants to the AER, their MLAs, or their municipalities.
- They offer to act as a conduit between the two parties (the complainant and the operator).

CASA Odour Complaints Report

Airshed zones don't currently conduct formal investigations for odour complaints. In cases where an airshed zone acts as a conduit between a complainant and another agency or operator, it conducts a bilateral follow-up.

Some airshed zones track basic details of odour complaints in an Excel spreadsheet, but most simply track each complaint on a one-off basis.

AAC stresses the importance of quick, meaningful and appropriate responses to odour complaints. Complainants generally receive a response within 24 hours; however, what constitutes "final follow-up" varies widely from organization to organization

Fort McMurray Community Odour Monitoring Project

Fort McMurray's Wood Buffalo Environmental Association has a highly developed system for tracking odours relative to Alberta's other airshed zones.

WBEA's Fort McMurray Community Odour Panel is a group of individuals, recruited from the city's various districts, who monitor and report odour occurrences throughout their regular day-to-day activities. They are trained to recognize and quantify the specific odour types they may encounter, and to report these observations via the WBEA website, through a web app on their smartphones, or using prepaid response observation cards. The data is collected and sent for further analysis.

More information at <http://www.odoview.com/Wbea/>.

Alberta Association of Municipal Districts and Counties (AAMDC)

After a request from CASA, the Alberta Association of Municipal Districts and Counties (AAMDC) sent a brief survey to its 69 members. Thirty-six districts and counties responded.

According to the survey, many AAMDC members rarely receive odour complaints—they cite numbers ranging from 20 per year to one odour complaint in the previous 12 years. That said, municipalities with industrial growth anticipate increased complaints in the future.

Many rural municipalities do not have municipal bylaws in place to address odour issues specifically, but instead handle complaints on an issue-by-issue basis or deal with them under another municipal bylaw (e.g., nuisance, land-use).

If a municipal bylaw is in place, the Peace Officer or Bylaw Enforcement Officer handles the issue. Some AAMDC members also indicated that the chief administrative officer responds to complaint issues if there is no enforceable bylaw in place.

Municipal fire departments investigate complaints regarding natural gas and refer to the appropriate agencies as required. If the odour is from an unknown source, the Government of Alberta might become involved.

Depending on the nature of the complaint, investigation or enforcement may be referred to an external party. For example, if the complaint applies directly to a confined feeding operation, the municipality redirects the complaint to the NRCB as the regulatory body. Complaints relating to energy development are directed to the AER.

Alberta Energy Regulator (AER)

The AER receives public complaints relating to energy industry activity. Complainants phone the Energy and Environmental 24-hour Response Line: 1-800-222-6514. This number connects them to the Government of Alberta's Co-ordination and Information Centre (CIC).

A team of ten Compliance Officers, working in shifts, operates the CIC 24 hours a day. Compliance Officers are required to have a Bachelor of Science (preferably in chemistry or environment science) plus at least two years of related experience (or equivalent).

The AER does not currently break down its odour complaint statistics by season, or time of day.

To report an energy or environmental complaint, stakeholders call the Energy and Environmental 24-hour Response Line: 1-800-222-6514. The AER and AESRD use this number for all complaints and emergencies related to the environment and energy development in Alberta.

The compliance officers who answer the 24-hour response line notify the appropriate agency and, if the situation warrants, dispatch emergency responders.

Compliance Officers break down odour complaints by chemical: H₂S ("rotten egg" smell), THC (petroleum smell, tar or oily smelling), SO₂ (burnt matches or industrial smelling) and "other."

Complaints are rated on a scale from 1–3 according to the amount of information, whether or not the source is identified, and whether there is an insignificant, minor, or significant potential adverse effect. They then take the following action:

Level 1 and 2 Complaints:

Call sheet is e-mailed to the Field Centre, on-call inspector, and Field Incident Response Support Team (FIRST) Duty Officer (DO). The AER representative returns call to stakeholder (unless anonymous) within prescribed time and gathers information.

Level 3 Complaints:

Caller is given the option to be directly transferred to the responsible AER representative or wait for a callback in approximately 15 minutes. CIC call sheet is e-mailed to Field Centre, On-Call Inspector, and FIRST DO. AER representative gathers information from the complainant.

The AER receives call transfer (or e-mail) from CIC, and gathers the following information from the complainant:

CASA Odour Complaints Report

- Complainant phone number/location (unless anonymous).
- Does complainant want to be anonymous and if no can we release their name?
- List and description of concerns. Does the complainant know the source of the odour?
- Has the complainant contacted the licensee? If yes, what information was provided?

AER staff attempt to verify a source and determine a responsible party. Then, if necessary, they conduct an onsite inspection to pinpoint the possible source (or sources).

AER representatives use a variety of tools to investigate complaints:

- Inspector training and knowledge
- Industry operators
- Ambient air-monitoring station data
- Mobile air-monitoring unit
- FLIR Camera: Infra-red detection principle
 - Hydrocarbons absorb infra-red
 - Camera shows absorption as smoke
- Photoionization Detector (PID)
 - Rapid Volatile Organic Compound detection
 - Total VOCs, 0.1 ppm to 10,000 ppm
 - Benzene, 0.1 ppm – 40ppm
- Portable ambient air analyzer (GASMET DX4040 FTIR)
 - Simultaneous analysis of up to 25 gas compounds from a library of 5000

Findings of any investigation or inspection are entered into the field inspection system form (FIS), with the data linked to the complaint. If multiple sites are investigated after an incident, their data is linked.

If a licensee is found to be in noncompliance, the AER proceeds with enforcement.

The AER advises complainants (unless they're anonymous) of the investigation results. The investigator documents this follow-up conversation in the comment section of the FIS. At one time, the AER conducted a monthly random callback survey to track satisfaction with its complaint response.

The AER conducts some analysis of its complaint data. Its annual report, available to all stakeholders, looks for trends from the previous year. Some data is reflected in monthly internal reports, which are reviewed by AER management and forwarded to the Minister of Energy. Additional analysis and in-depth studies are conducted as needed.

The AER has no process to openly share complaint information with other agencies.

Under the Freedom of Information and Protection of Privacy Act (FOIPPA), the AER cannot release any personal information. Other agencies can submit FOIP requests with

CASA Odour Complaints Report

the AER FOIP Coordinator for information about compliance. AER incident information can also be purchased through Environment Information Sales.

Alberta Environment and Sustainable Resource Development (AESRD)

AESRD received about 10,000 calls at its 24-hour Coordination of Information Centre (CIC) in 2013, of which 519 were related to odour. The CIC's response line is 1-800-222-6514.

In addition to the Natural Resources Conservation Board (NRCB) and the Alberta Energy Regulator (AER), which made their own presentations to CASA's odour working group, the CIC services the Alberta Environment Support and Emergency Response Team, Alberta Environment and Sustainable Resource Development, and Alberta Transportation.

The CIC is staffed by 10 Compliance Officers (although they are currently short-staffed at 7) with a Bachelor of Science (preferably in the fields of Chemistry or Environmental Science), plus at least 2 years of related experience (or equivalent). It takes about 18 months for a CIC Compliance Officer to be fully trained.

In 2013 the CIC received about 10,000 calls of which 519 were related to odour. AESRD also receives about 15 emails per year from industry members who are self-reporting. The same procedures apply to both calls and emails.

Compliance Officers have lights on their telephone to indicate who the incoming call is for (e.g., AESRD). While taking a call for AESRD, the Officer pulls up an online form and fills it out, gathering as much detail about the complaint as possible. Callers are asked if they wish to be anonymous and if they would like a callback. (If a caller chooses to remain anonymous they will not receive a callback.)

While AESRD does not have a specific form for odour complaints, callers are asked to identify the source of the odour if they can (e.g., sour gas), rate the odour from 1–10, and to provide the time of day they noticed the odour. The Compliance Officer uses information collected from the caller to help triage the complaint.

This can sometimes prove difficult because “offensive” is subjective (“it stinks” does not constitute an offense). An Environmental Protection Order can be issued due to odour, but this step must be based on evidence.

Not every odour call that comes in gets an investigation. Every caller gets a callback, but a formal investigation depends on the ability to determine what the odour is, where it's coming from, etc.

Urgent complaints (e.g., gas leaks) are referred to the Emergency Response Team. If the complaint is not an emergency, the officer emails the local AESRD office or to the on-call Regional Compliance Manager. If the complaint was referred to the on-call Compliance Manager, he or she must contact the CIC by phone within 15 minutes to confirm receiving the email.

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The CIC is not an investigative body – rather they collect information and pass it on to the appropriate people.

AESRD Compliance Officers in the field investigate odour complaints using air monitoring trailers, air canisters, and AESRD's mobile air monitoring laboratory. It specifically analyzes samples for priority pollutants: NO_x, H₂S, NH₃, O₂, THC, TRS, and BETX.

As complaints are investigated and the inspectors collect information, they enter it into the online form so that all the information about the complaint is in one place.

AESRD tracks its data through its online form. This data can be sorted in various ways, but data is not otherwise routinely analyzed. CIC staff informally track clusters of calls on a whiteboard.

The CIC has an agreement with Environment Canada that they will be contacted under certain circumstances (in terms of odours, the only one that might apply is “Release of contaminant to the air or water which may cross Alberta border”). Environment Canada links to other federal agencies as necessary.

The CIC often receives calls not related to the agencies they service. The CIC tries to refer those calls to the correct agency, to minimize people getting bounced around.

The CIC would like to increase awareness of their telephone number both with the public and within the GoA. They do not currently have the resources to have staff engage in educational outreach.

Edmonton Waste Management Centre (EWMC)

The City of Edmonton has a 311 hotline where residents can call to report odour complaints (along with any other concerns relating to the city, from potholes to the arena decision). Many of the odour calls to 311 do not relate to the EWMC or Goldbar Wastewater Plant. The city's drainage department, for example, follows up on calls related to the sewage and stormwater systems in the City, Epcor follows up on calls regarding the Goldbar Wastewater Plant. Gas companies are contacted for a 'natural gas' odour complaint. In other words, there are many other players in the City of Edmonton's odour call system.

If a call is related to the EWMC, it is forwarded to assigned staff/consultants at the drainage branch, the EWMC, and Goldbar.

Citywide, 46 percent of odour calls are in July and August, with 51 percent between 6 and 10 p.m.

Callers to 311 are asked for their contact information (for callback and investigation), and are asked to describe the odour and its strength (usually described as very high).

The EWMC and Goldbar Wastewater Plant coordinate odour complaints because of some linkages between operations, and also because they share contracts with third-party odour consultants.

In addition to "staff with trained noses" and its specially designed "odour wheel" (to help categorize odours), EWMC uses an array of electronic tools including Odowatch e-noses.

If a callback is requested during the initial 311 interaction, EWMC will do so.

A community or on-site odour survey can be triggered by two or more 311 calls relating to EWMC or Goldbar in a six-hour period, by one call from ESRD, or at the discretion of an Edmonton odour representative (for example, a proactive survey if a planned activity may cause odour concerns).

EWMC provided a list of lessons learned:

- It is important to practice due diligence in managing odours at the source.
- When odours occur, take appropriate action to correct them (within technical reality and practicality).
- Fixing odour problems doesn't happen instantly (sometimes we need engineered solutions).
- Put an odour plan in place, with actions to take when odour complaints occur, and when weather conditions (e.g., inversions) may cause odour problems.
- Have a plan to maintain good communications with the community
- Failure to properly address odour issues increases public angst.

Environmental Public Health (EPH)

Environmental Public Health enforces the Public Health Act (PHA) of Alberta. The act allows public health inspectors and environmental health officers to investigate issues related to public health.

The PHA includes a nuisance and general sanitation regulation—this is the area that generally applies in odour complaints. Nuisance is defined as “a condition that is or that might become injurious or dangerous to the public health, or that might hinder in any manner the prevention or suppression of disease.” The regulation also addresses public toilets.

EPH does not track the specific number of odour complaints (the term it uses is “service requests”) it receives. Service requests include situations involving both indoor and outdoor air quality.

EPH is obligated to look into every complaint it receives.

Odour complaints are reported to EPH in different ways. Some are forwarded from Health Link Alberta. The EPH also receives direct calls, emails, and walk-ins, as well as referrals from other agencies and municipalities.

When an odour complaint arrives at Health Link Alberta, the trained nurses who field AHL calls go through a specific template, logging information that is passed along to EPH.

At the EPH, receptionists are trained to collect basic information from callers before assigning the request to the appropriate PHI. PHIs also field direct calls. Callers are asked for their personal contact information, the origin or location of the odour, and the odour’s description, frequency, and intensity.

If a complaint relates to a specific location, it is passed on to the field officer for that region. If the field inspector is not available, the complaint is referred to the Edmonton office.

In the case of odour complaints, EPH’s response protocol is currently rather informal. An inspector will generally call the complainant for more details of the problem. The inspector will conduct an inspection. The problem may be evaluated simply by nose, because EPH has limited monitoring equipment. In some cases, an inspector will request assistance from AESRD and its mobile air-monitoring laboratory.

If the inspector determines there is an odour problem, the person or business responsible for the odour is required to make a plan of action. If they fail to correct the situation, EPH can issue written notice. After that, an executive order may be issued, followed by charges.

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If the EPH determines that another agency has jurisdiction, or would be better able to respond, the complainant is directed to that agency. For example, a caller complaining about dust or odours from a feedlot would be referred to NRCB.

Caller identity is not shared with other agencies unless the caller gives permission.

A Public Health Inspector contacts each caller within 48 hours of the initial request (an urgent complaint can trigger a faster response). The Public Health Inspector logs every action on the request, and inputs the information into a data management system.

Every service request is tracked in data management systems. AHS is working towards having one data system for all its zones.

Depending on the situation, a complaint is considered closed once the issue has been resolved to the best of everyone's abilities. The time this takes can vary widely.

Hinton Pulp

At Hinton Pulp, complaints are referred to as public inquiries. The company receives odour complaints via its Main Gate phone number, which is staffed 24/7. It regularly advertises the number in both local papers.

Odour complaints tend to occur more frequently in the summer months due to maintenance on effluent ponds. Most odour complaints are related to the effluent treatment system rather than the pulp mill.

Hinton Pulp received 58 odour complaints in 2013, 96 in 2012, 58 in 2011, and 28 in 2010. Most complaints occur during the summer, when people are more likely to be outdoors and to have their windows open. They also occur mostly during normal waking hours.

Hinton Pulp has a formal process for handling complaints that is outlined in a flow chart and two procedural documents. All odour complaints are reported to ESRD within 24 hours.

The employee who takes the call fills out a public inquiry form (see appendix) before redirecting the call elsewhere in the company for investigation and response.

Hinton Pulp uses the following descriptors for troubleshooting:

- Really bad smell (skunk)
- Rotten egg smell
- Rotten vegetable
- Rotten cabbage

The description of the odour helps pinpoint possible causes. The shift engineer and mill co-ordinator then implement the “Odour Complaints Checks” list to troubleshoot and resolve the problem.

Once the investigation is complete, the paperwork is distributed and filed. A copy is sent to the Technical Department, where a staff member provides a follow-up call to the inquirer.

Hinton Pulp reviewed its public inquiry data back to January 2010, in conjunction with Stantec. The analysis looked for patterns related to time of year, time of day, and wind and weather conditions.

Hinton Pulp has a variety of tools in place to help manage odour and investigate complaints (e.g., ambient monitoring station downwind of the mill operated by the West Central Airshed, stack monitors, community advisory council).

The company shares its numbers of public inquiries for odour with its own staff, through the monthly Environmental Summary, with the public advisory committee at bimonthly

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meetings, with Alberta Environment in a monthly air emissions report (in addition to the initial notification made within 24 hours of each complaint), and with the Town of Hinton upon request. The mill manager is also available for media inquiries.

Natural Resources Conservation Board (NRCB)

NRCB receives hundreds of complaints each year. (They presented a bar graph indicating numbers between 200 and 350 annually over the past five years.) NRCB receives its highest number of complaints in the spring and fall. Most complaints relate to odours from barns and lagoons, or from manure spreading.

NRCB's 24-hour complaints line connects to a dedicated line in ESRD's CIC. A team of ten Compliance Officers, working in shifts, operates the CIC 24 hours a day. Compliance Officers are required to have a Bachelor of Science (preferably in chemistry or environment science) plus at least two years of related experience (or equivalent).

The CIC records details of each complaint in its complaint response log," with odour complaints also requiring completion of the "Odour Report Form." The form is faxed to NRCB's Red Deer office within 15 minutes, with hard copies sent by GoA courier the next working day.

The NRCB investigates each odour complaint. Some issues can be resolved by calling operators to check what types of activities are going on. At other times, an NRCB investigator visits an operation and checks for permit compliance. The NRCB uses a response matrix (see appendix) to guide its investigations.

Data from the Odour Report Form is entered into an NRCB database and the case is assigned an inspector. Anyone at NRCB can access this data. NRCB is not able to issue fines, other than some very small administrative fines. The NRCB sometimes has to seek a court order if an operator refuses access to the site in question. Prosecution is used only as a last resort; it is costly and lengthy.

The NRCB tracks the number of odour complaints received each year, alongside the number of operations. The CIC stores the data entered in electronic call sheets in an active SharePoint site for one month, and then automatically relocates the call sheets to an archive site. Paper call sheets are stored for two years (the statute of limitation for environmental charges). The NRCB keeps the identity of all complainants confidential.

Oil and Gas sector (CNRL)

Roxanne Bretzlaff of Canadian Natural Resources Ltd. made a presentation as a representative example for the oil and gas sector.

She split her presentation into two parts: odour complaints received by conventional oil and gas operations, and those received via the Wood Buffalo Environmental Association (WBEA).

Conventional operations receive few odour complaints directly. Most complaints go directly to the Alberta Energy Regulator (AER; see above).

If an odour complaint does come in directly, the process is very informal. An administrator may take the call, or it could go through to a field staff member. If the call goes to an administrator, the information is recorded in a log book; otherwise, the complaint is simply dealt with as part of regular operations. A log entry will include the date and time of the call, contact information for the complainant, the location of the odour, and any additional comments (e.g., description of the odour, weather conditions).

The complaint is passed on to a responder, who follows up by checking to see if an odour can be detected—and, if so, records the location, the odour's description and intensity, and the weather conditions. The operator checks facilities to identify issues, and reports on any corrective actions taken.

Finally, all the information is communicated back to the original complainant.

The WBEA has a more formal process. Some odour complaints arrive at the WBEA directly, while others go through the AESRD hotline at the CIC. Companies sometimes also call the AESRD hotline proactively if they anticipate potential odour problems; for example, because of an emergency upset or a planned process.

If the CIC receives an odour complaint for the Wood Buffalo area, the compliance officer assesses it to decide whether or not to initiate the WBEA odour protocol. The officer checks the meteorological and live air-monitoring data from the WBEA, and initiates the protocol if the data indicate that odour may be a problem. The protocol is also initiated if the CIC receives two or more odour complaints about the same issue.

If the situation warrants, the AESRD identifies the zone (or zones) in which the protocol will be activated, and calls industry members in those zones to have them activate their protocols.

Each industry member checks its facilities to determine if it could be the source of the odour. Within one hour, it reports back to the CIC with its facility status, and whether any recent events may have caused the odour problem. As long as the protocol remains activated, industry members must report any changes in the status of their facilities.

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If those initial reports fail to identify a source for the odour, industry representatives continue their efforts. If necessary, AESRD will ask WBEA to send out its mobile monitoring laboratory. AESRD might also initiate other investigations of the odour source during the event.

If the investigation has gone through the WBEA, the AESRD deactivates the Wood Buffalo odour protocol once the issue has been resolved. All of the industry members in the activated zones submit a seven-day report to AESRD and WBEA. The reports are reviewed at the WBEA quarterly meetings, to discuss any lessons learned.

Transportation sector (Altex Energy)

Altex Energy occasionally receives one or two odour-related complaints, usually during loading; however, there's no regular pattern to their frequency. Some facilities receive daily complaints, while others have never received a complaint. The company also sometimes receives complaints when the facility is not operating.

Altex has no formal complaint process. It receives complaints by phone and deals with them on a case-by-case basis.

The initial contact is the facility manager, who has 20 years in the transportation industry. He collects the following:

- name
- phone number
- description of the odour
- location odour was detected

Altex checks local airshed information for wind speed and direction, as well as the facility operations schedule. If necessary, the facility manager checks for leaks onsite using detector tubes, etc.

Altex tries to follow up complaints immediately, although this is not a formal policy. Altex determines its response case-by-case.

No formal procedures or documentation is in place. Altex plans to eventually develop policies and forms to help them track data.

The industry is currently unregulated, so Altex is not required to report or share data. They have shared data with the Peace Airshed Zone Association (PAZA).

Altex would like to build more engagement with the surrounding community.

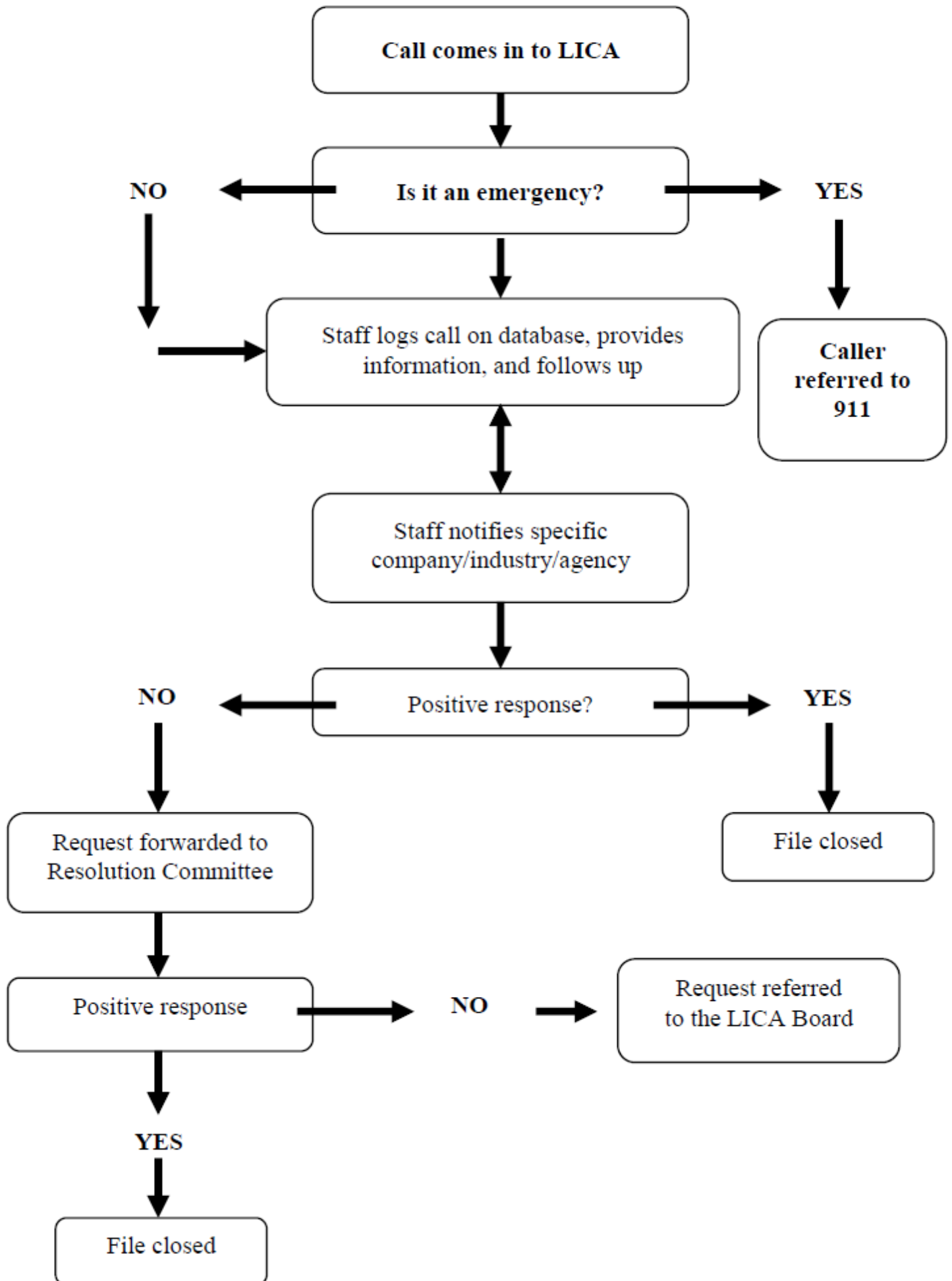
Section 3:

Appendix

Forms and policies, by presenter

Alberta Airsheds Council (AAC)

LICA'S ISSUE-RESOLUTION PROCESS





Box 8237
 5107W - 50th Street
 Bonnyville, AB T9N 2J5
 Phone: (780) 812-2182
 Fax: (780) 812-2186
 Toll Free: 1-877-797-2182
 E-Mail: lica2@lica.ca
 Website: http://www.lica.ca

Unusual Occurrence Data Collection Sheet

As part of ongoing monitoring programs, LICA needs information on unusual occurrences, which may include an unexplained noise, vibration, traffic, etc. Your observations can make us aware of these occurrences and help us identify and/or resolve the causes. The information may be shared with other organizations and agencies. **When you note an unusual occurrence, please fill out the form below as fully as possible and forward to the LICA office (contact information above). Thank you for your assistance!**

G E N E R A L	Today's Date: _____ Name: _____ Phone#: (____) ____ - _____ Address: _____ E-Mail: _____ Legal Land Description (Rural): _____ Date, Time, and Location of Occurrence: _____ Duration of Occurrence: _____ hour(s) _____ minute(s) _____ second(s) What were the weather conditions at the time of the incident? _____ Wind: <input type="checkbox"/> Breeze <input type="checkbox"/> Moderate <input type="checkbox"/> Strong Direction from: <input type="checkbox"/> North <input type="checkbox"/> East <input type="checkbox"/> South <input type="checkbox"/> West Outside Temperature: _____ °C or _____ °F Permission to Release Name <input type="checkbox"/> Yes <input type="checkbox"/> No						
O D O U R	Was there an odour? <input type="checkbox"/> Yes <input type="checkbox"/> No Was the odour: <input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Strong What did the odour smell like? <input type="checkbox"/> Rotten Egg <input type="checkbox"/> Chemical <input type="checkbox"/> Sweet <input type="checkbox"/> Sour <input type="checkbox"/> Hydrocarbons <input type="checkbox"/> Ammonia <input type="checkbox"/> Bleach						
T Y P E O F O C C U R R E N C E	<table border="0" style="width: 100%;"> <tr> <td style="width: 30px; text-align: center;">N O I S E</td> <td>Was there a noise? <input type="checkbox"/> Yes <input type="checkbox"/> No Was the noise: <input type="checkbox"/> Faint <input type="checkbox"/> Conversation Level <input type="checkbox"/> Like A loud TV <input type="checkbox"/> Had to cover ears</td> </tr> <tr> <td style="width: 30px; text-align: center;">T R A F F I C</td> <td> Has the traffic changed in the last: <input type="checkbox"/> 3 months <input type="checkbox"/> 6 months <input type="checkbox"/> 1 year <u>Average daily increase in traffic (from previous number of vehicles to current number of vehicles):</u> From: <input type="checkbox"/> 10 vehicles or less <input type="checkbox"/> 11-20 vehicles To: <input type="checkbox"/> 11-20 vehicles <input type="checkbox"/> 21-30 vehicles <input type="checkbox"/> 21-30 vehicles <input type="checkbox"/> 31-40 vehicles <input type="checkbox"/> 31-40 vehicles <input type="checkbox"/> 41-50 vehicles <input type="checkbox"/> More than 50 vehicles When does the increase in traffic occur? <input type="checkbox"/> 6a.m. to 12p.m. <input type="checkbox"/> 12p.m. to 6p.m. <input type="checkbox"/> 6p.m. to 12a.m. <input type="checkbox"/> 12a.m. to 6a.m. </td> </tr> <tr> <td style="width: 30px; text-align: center;">D U S T</td> <td> Has the road been surfaced for dust control? <input type="checkbox"/> Yes <input type="checkbox"/> No Does it need repairing? <input type="checkbox"/> Yes <input type="checkbox"/> No Are there trees in the area for dust control? <input type="checkbox"/> Yes <input type="checkbox"/> No What time of the day is the dust most evident? _____ </td> </tr> </table>	N O I S E	Was there a noise? <input type="checkbox"/> Yes <input type="checkbox"/> No Was the noise: <input type="checkbox"/> Faint <input type="checkbox"/> Conversation Level <input type="checkbox"/> Like A loud TV <input type="checkbox"/> Had to cover ears	T R A F F I C	Has the traffic changed in the last: <input type="checkbox"/> 3 months <input type="checkbox"/> 6 months <input type="checkbox"/> 1 year <u>Average daily increase in traffic (from previous number of vehicles to current number of vehicles):</u> From: <input type="checkbox"/> 10 vehicles or less <input type="checkbox"/> 11-20 vehicles To: <input type="checkbox"/> 11-20 vehicles <input type="checkbox"/> 21-30 vehicles <input type="checkbox"/> 21-30 vehicles <input type="checkbox"/> 31-40 vehicles <input type="checkbox"/> 31-40 vehicles <input type="checkbox"/> 41-50 vehicles <input type="checkbox"/> More than 50 vehicles When does the increase in traffic occur? <input type="checkbox"/> 6a.m. to 12p.m. <input type="checkbox"/> 12p.m. to 6p.m. <input type="checkbox"/> 6p.m. to 12a.m. <input type="checkbox"/> 12a.m. to 6a.m.	D U S T	Has the road been surfaced for dust control? <input type="checkbox"/> Yes <input type="checkbox"/> No Does it need repairing? <input type="checkbox"/> Yes <input type="checkbox"/> No Are there trees in the area for dust control? <input type="checkbox"/> Yes <input type="checkbox"/> No What time of the day is the dust most evident? _____
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O T H E R I N F O R M A T I O N	Describe the Occurrence (attach additional sheet if required): _____ _____ _____ _____ Possible Source: _____ _____ _____ _____						

Alberta Energy Regulator (AER)

Close

Powered by:

Government of Alberta

Environment

Call Information

Reference #	Call Date:	Call Time:	Call Taken by:
	01/07/14	09:52	nancy welsh

Caller Information

Anonymous

Caller's First Name:

Caller's Last Name:

Organization/Facility: Address: Municipality: Postal Code:

Primary Phone Number: Type: Ext:

Secondary Phone Number: Type:

Text

Incident Information

Incident Details/
Complaint Statement:

Reported Source: Approval #

Legal Description: LS S T R W M

Location Description:

Substance:

Quantity/Volume:

UN Number: Class:

Incident Date(M/D/Y): Incident Time:

Notifications

Notified After Hours EPO/Inspector Name:

Call Type: Incident

Call Back Requested: No Public Complaint Rating:

Report Required: AENV District:

Assigned To: ASERT Notified By:

Agency Lead: EC Notified By:

AER Notified? AER Field Centre

Compliance

Station Date	Start Time	End Time	Value	Units	Contaminant	Limit	Winds Degrees Km/hr
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

* Click on insert row to add more items

Insert Row

Release Criteria	
Release to Air?	Highly Visible? <input type="checkbox"/>
Comments:	<input type="text"/>
Release to Land?	
Comments:	<input type="text"/>
Release to Water?	Which Water body? <input type="text"/>
Comments:	<input type="text"/>
Potential for off lease/off site impact?	<input type="text"/>
Road Closures?	
Comments:	<input type="text"/>
Injuries/Fatalities?	
Comments:	<input type="text"/>
Is Media on scene?	
Details:	<input type="text"/>
Has an ERP/ERAP been Activated?	
Comments:	<input type="text"/>

Dangerous Goods Incident Criteria	
Carrier:	<input type="text"/> DG District: <input type="text"/>
Consignor:	<input type="text"/> Consignee: <input type="text"/>
TDG Severity:	Regulated: <input type="checkbox"/>
Transport Mode:	Activity: <input type="text"/>

Email Notification			
	Needed?	Primary Contact	Secondary Contact
ASERT	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
Region	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
Environment Canada	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
DGRS	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>

** Enter names in GOA\firstname.lastname format and email address for Environment Canada and Secondary Contacts*

Get Reference No.

Submit & Close

Close

CIC Call Sheet E-mail (Example)

Please be advised that the CIC has received the following information.

Reference Number: 27600

Call Date & Time: 07/12/2013 5:25:08 AM

Call Taken By: Mike Smith

Caller's First Name: John

Caller's Last Name: Doe

Organization/Facility: public

Municipality: Edmonton

Primary Phone Number: (780)555-5555

Primary Phone Number Type: Home

Callback Requested: Yes

Incident Details/Complaint Statement: Very strong H₂S and petroleum smell. No wind. Level 5 in a scale of 1-10. AER lead, Level 3 complaint.

Reported Source: CNRL

Legal Description: LS S T R W M

Location Description: 137 Maple Court, Edmonton

Substance: N/A

Quantity/Volume: N/A

Incident Time: 05:00:00

Incident Date: 07/10/2013

Agency Lead: AER Field

FIS Incidents - Complaint

Add search criteria

Licence Type _____
Licence Number _____
 Incident Source (circle one) F W
Pipeline Damage Type (circle one) L R H
 Licence Name _____
 Field Centre _____
 Facility Type _____
 Incident From Date _____
 Incident To Date _____
 NW Corner Location _____
 SE Corner Location _____
AER Contact: _____
 Data complete (circle one) Yes No
 Release Assessed (circle one) Yes No

General

Incident Date/Time _____
Notification Date/Time _____
 Operator Name _____
 Complete Date _____
 AER Contact _____

Contact Info

Last Name _____
First Name _____
 Phone Number _____
 Permission Received to Release Name
 (circle one) Yes No
 Anonymous Complainant (circle one) Yes No
Nearest town to complainant

Incident Number: _____

Contact Info continued

ERG Contacted (circle one) Yes No
 Referred Information
 Referred by: _____
 Referred to: _____
 Agencies Notified _____

Investigation

Complainant Contacted Operator (circle one) Yes No
 Complaint Source in Compliance (circle one) Yes No
 Associated Release Incident Number _____
 Date Complainant Advised of Finding _____
 Complainant Requested Visit (circle one) Yes No
 Date Visited _____ Mediation Required? Yes No
 Site Evaluation
 Inspection Required (circle one) Yes No
 Inspector _____
 Inspection Date _____ Insp. Result _____
 Air Monitoring Requested by _____ Date _____
 Air Monitoring Result _____
 Noise Monitoring Required _____ Local _____ Detailed
 Noise Monitoring Date _____
 Noise Monitoring Result _____ dBa

Complaint Detail

Importance	Category	Type	Global Concern
1	_____	_____	Yes No
2	_____	_____	Yes No
3	_____	_____	Yes No
4	_____	_____	Yes No
5	_____	_____	Yes No

Comments

Comment Category _____
 Comment Type _____
 Comment Date _____
 Author Name _____

Comments:

Comment Category _____
Comment Type _____
Comment Date _____
Author Name _____

Comments:

Comment Category _____
Comment Type _____
Comment Date _____
Author Name _____

Comments:

Comment Category _____
Comment Type _____
Comment Date _____
Author Name _____

Comments:

Comment Category _____
Comment Type _____
Comment Date _____
Author Name _____

Comments:

Edmonton Waste Management Centre (EWMC)



EWMC Odour Wheel

Adopted from:
Suffet, I.H. And Rosenfeld, P.E.

Hinton Pulp

ENVIRONMENTAL PUBLIC INQUIRY FORM

Technical Inquiry # _____

FILLED IN BY LPO OR SWITCHBOARD OPERATOR:

RECEIVED BY: _____

CALLER: (may remain anonymous):

NAME: _____

DATE OF INQUIRY: _____

ADDRESS: _____

TIME OF CALL: _____

PHONE # _____

CALL FORWARDED TO: _____

TIME FORWARDED: _____

NATURE OF INQUIRY: ODOUR (type _____) NOISE DUST
OTHER POLICY REQUEST

DESCRIPTION _____

TIME _____

LOCATION _____

FILLED IN BY SHIFT SUPERVISOR:

INVESTIGATED BY: _____

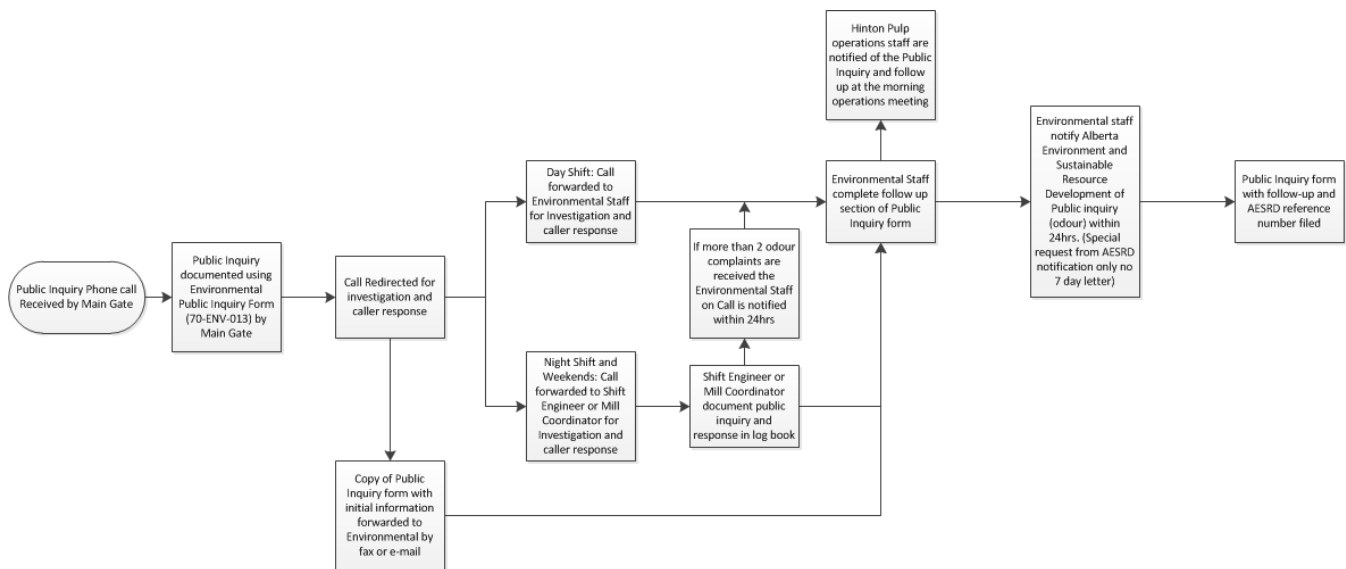
VERBAL RESPONSE _____ TIME _____

TO INQUIRER: _____

FOLLOW-UP REQUIRED? YES NO

NOTES FROM FOLLOW-UP _____

Public Inquiry Process



**Natural Resources Conservation Board
(NRCB)**



ODOUR REPORT FORM

TIME AND DATE REPORT RECEIVED:	DATE AND TIME OFFENDING ODOUR WAS NOTED:
--------------------------------	--

NAME AND ADDRESS OF PERSON FILING REPORT:	TELEPHONE (H):
E-MAIL ADDRESS (if e-mail communication is preferred):	TELEPHONE (W):

During the NRCB processing and response to this report, can you be identified as the source of the report? Yes No

Please provide as much of the information requested below for the odour you are reporting. This information will help the NRCB to identify the source of the odour and assist in developing an appropriate response.

LOCATION OF THE ODOUR:	HAVE YOU COMPLAINED ABOUT AN ODOUR COMING FROM THIS LOCATION BEFORE:
YOUR LOCATION IN RELATION TO THE ODOUR:	Yes <input type="checkbox"/> No <input type="checkbox"/> (If yes, when):

ACTIVITY CAUSING THE ODOUR (if known):

WEATHER CONDITIONS: What were the weather conditions when you noticed the odour?

GENERAL CONDITIONS:	CLOUD COVER:	WIND SPEED:	WIND DIRECTION:
<input type="checkbox"/> dry	<input type="checkbox"/> clear	<input type="checkbox"/> light	
<input type="checkbox"/> rainy	<input type="checkbox"/> light clouds	<input type="checkbox"/> steady	
<input type="checkbox"/> foggy	<input type="checkbox"/> scattered clouds	<input type="checkbox"/> strong	
<input type="checkbox"/> snowy	<input type="checkbox"/> dense clouds/ overcast	<input type="checkbox"/> gusting	

EXTENT OF THE ODOUR: How widespread was the odour? (Check one only)

<input type="checkbox"/> Localized (only noticed odour within the sight of the suspected source)	<input type="checkbox"/> Widespread (noticed odour more than 500 metres away from the suspected source)
<input type="checkbox"/> Limited Off-site Impact (noticed odour up to 500 metres from the suspected source but no further)	<input type="checkbox"/> don't know

FREQUENCY: How often have you noticed this odour in the past twelve months? (Check one only)

<input type="checkbox"/> more than once a week for several months	<input type="checkbox"/> two or three times in the past year
<input type="checkbox"/> once or twice per month	<input type="checkbox"/> once or less in the past year
	<input type="checkbox"/> don't know

INTENSITY: How strong is this odour? (Check one only)

<input type="checkbox"/> Faint (barely detectable, need to stand still and inhale facing into the wind to notice it)	<input type="checkbox"/> Strong (odour is pervasive and can be easily detected at all times)
<input type="checkbox"/> Moderate (odour is easily detected while walking and breathing normally, but is not overpowering)	<input type="checkbox"/> Very Strong (odour can be detected at all times and is causing physical symptoms such as nausea, headaches, burning sensation in eyes and nose, etc.)
	<input type="checkbox"/> don't know

DURATION: How long has this odour lasted?

DATE/TIME ODOUR BEGAN:	DATE/TIME ODOUR ENDED:
------------------------	------------------------

OFFENSIVENESS: How unpleasant is the odour? (Check one only)

<input type="checkbox"/> slightly unpleasant	<input type="checkbox"/> unpleasant
<input type="checkbox"/> moderately unpleasant	<input type="checkbox"/> highly unpleasant and causing physical discomfort
	<input type="checkbox"/> don't know

DESCRIPTION OF THE ODOUR: (Check all the words that describe the odour)

<input type="checkbox"/> acidic	<input type="checkbox"/> ammonia	<input type="checkbox"/> ashes	<input type="checkbox"/> bitter	<input type="checkbox"/> burnt
<input type="checkbox"/> chemicals	<input type="checkbox"/> corn chips	<input type="checkbox"/> decayed matter	<input type="checkbox"/> feathers	<input type="checkbox"/> fishy
<input type="checkbox"/> fresh cow manure	<input type="checkbox"/> garbage	<input type="checkbox"/> grain	<input type="checkbox"/> hay	<input type="checkbox"/> leaves
<input type="checkbox"/> manure	<input type="checkbox"/> mildew/ mold	<input type="checkbox"/> moth balls	<input type="checkbox"/> pig manure	<input type="checkbox"/> rancid
<input type="checkbox"/> rotten cabbage	<input type="checkbox"/> rotten eggs	<input type="checkbox"/> rotten leaves	<input type="checkbox"/> rotting meat	<input type="checkbox"/> sewage
<input type="checkbox"/> skunk	<input type="checkbox"/> smoke	<input type="checkbox"/> sulfur	<input type="checkbox"/> sweet	<input type="checkbox"/> urine
<input type="checkbox"/> vinegar				
<input type="checkbox"/> Other (please describe):				

ADDITIONAL COMMENTS/ OTHER RELEVANT INFORMATION:

The person providing this information acknowledges that the information was provided under the authority of the *Agricultural Operation Practices Act*, and is subject to the provisions of the *Freedom of Information and Protection of Privacy Act*, and that disclosure in accordance with the provisions of these Acts may be required.

Date of Acknowledgement	Signature (if filing paper copy of report)	Print Name
-------------------------	--	------------

Would you like to receive a follow-up call or progress report? Yes No (If yes, please ensure you have provided contact information).

Analysis of Odour Complaints for an Operation

June-Aug

Weather Conditions		Cloud Cover		Wind Speed	
Dry:	316	Clear:	239	Light:	303
Rainy:	17	Light Clouds:	59	Steady:	5
Foggy:	2	Scattered Clouds:	18	Strong:	1
Snowy:	0	Dense Clouds / Overcast:	14	Gusting:	1
Frequency Of Odour		Offensiveness Of Odour		Description Of Odour	
> once per week for several months:	317	Slightly Unpleasant:	2	Manure:	1
1-2 per month:	10	Moderately Unpleasant:	10	Pig Manure:	331
2-3 per year:	1	Unpleasant:	95		
1 or less in past year:	1	Highly Unpleasant:	223		
Not Sure:	3	Not Sure:	0		
Intensity Of Odour		Extent Of Odour			
Faint:	0	Localized:	1		
Moderate:	9	Limited Off-site Impact:	4		
Strong / Pervasive:	132	Widespread:	322		
Very Strong:	193	Don't Know:	9		
Unknown:	1				



INSPECTOR'S REVIEW
Inspector reviews NRCB files to identify permit conditions and confirm whether there have been previous complaints

OPERATOR CONTACTED
Inspector calls operator to determine if there are circumstances that could explain the odour

INSPECTION REQUIRED ?
History of complaints, operator's compliance history, odour information reviewed and decision on need for inspection made

FILE CLOSED
Inspector updates odour report in the CFO Database to indicate that no inspection undertaken & no enforcement action is required. File closed & complainant notified

ODOUR SOURCE IDENTIFIED
Obvious steps can be taken to reduce odour emissions

FILE CLOSED
Inspector updates odour report in the CFO Database to indicate that no inspection undertaken & no enforcement action is required. File closed & complainant notified

ODOUR RESULTING FROM NON-COMPLIANCE
Inspector determines that odour is result of non-compliance with permit conditions

ODOUR IS FROM GENERALLY ACCEPTED PRACTICE (Nuisance)

ODOUR IS AN INAPPROPRIATE DISTURBANCE
Odour's FIDO is sufficient to constitute an inappropriate disturbance

FILE CLOSED
Inspector updates odour report in CFO database to indicate that no enforcement action is required. File closed & complainant notified

