Complaint Procedures Subcommittee	
Issue No.	1
Key Issue	Complaint guidance document: What recommendations for change, if any, are needed for the draft Guidance Document for Field Operations Investigation of Complaints to ensure timely response and adequate follow through?
	Basis: Need to review, finalize, and implement draft complaint document prior to implementation; Public Comment; Staff Input; and Review of Current Practices.
Other Subcommittees Reviewing Issue	EIC
Recommendation	The Complaints Subcommittee reviewed the June 9, 2004 complaint guidance document in its entirety to ensure it addressed and resolved the key issue as it related to timely response and adequate follow through of complaints based on previously received public comments, current survey comments, and staff evaluations. Specifically, the team concluded that: (1) the proposed guidance document was adequately revised to address the above issues and should be implemented; (2) the agency should continue to accept anonymous complaints; (3) a sensitivity training component should be included in the Basic Investigator Training, as well as in all annual programmatic investigator training; (4) initial and followup training at regular intervals is crucial to effective complaint handling and response; (5) Citizens Collected Evidence (CCE) applicability continues to exist; (6) the ability to provide complaint handling and response training to the public upon request would be an effective means to expand the public's knowledge of changes in complaint procedures; and (7) FOD should periodically review other states' protocols to determine if TCEQ's protocol is still progressive and cutting edge. The positive implications of the implementation of the Complaint Guidance document include: (1) greater consistency between and within TCEQ regions and staff, (2) greater responsiveness and objectivity by staff, and (3) not a significant resource increase to implement.
	Basis: The Complaints Subcommittee reviewed the complaint guidance document draft, as well as HB2912 and the public comments. A Complaints Guidance team was organized in February 2003 to review and rewrite the existing complaints manual to accommodate CCEDS and assess the adequacy of current procedures for current applicability and modify as needed. The subcommittee reviewed the work performed by the Complaints Guidance team.

	Implementation Impacts: Implementation of the latest draft Complaints Guidance document should: • require no additional LBB measures; • include a copy of the document being provided to EPA Region VI; • be accomplished within one month of final commission approval. Training of all Field Operations Division field investigators should be conducted within one year of final commission approval; • supersede the current Complaint Guidance document being used by the Field Operations Division; • have a minimal implementation cost. Initial and followup training, including sensitivity training of agency staff, can be conducted at regularly scheduled training events.
Other Alternatives	Essentially none, however, the subcommittee did consider and disregarded the following alternatives: (1) discard and rewrite the proposed complaints guidance document - this was considered unproductive and unnecessary as the complaints guidance team had thoroughly assessed the needs of the state and the agency, and was better able to determine what would effectively work in the field; and (2) continue to use the current protocol - it was determined that the proposed complaints guidance document was a better process because it reflected the changes needed to coincide with the current database system the investigators are using.
Notes	The Complaints Subcommittee members reviewed HB2912 and concluded that the agency has implemented all relevant provisions. The Complaints Subcommittee members agreed that this document is inter-related with key issue number 2 - Nuisance Odor Protocol report.

Complaints Issue No. 1 - Attachment A

Guidance Document
for
Field Operations Investigation of Complaints

Draft

June 9, 2004

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Section 1

General Complaint Information

1.1 Definition of a Complaint

A complaint is a type of incident [as defined by the Field Operations Division Standard Operating Procedure on the Web (FODWEB) Incident Guidance/Introduction] (Insert hyperlink) which is a communication, either oral or written, to the Texas Commission on Environmental Quality (TCEQ), reporting a situation or event which the complainant alleges is a possible environmental, health, and/or regulatory concern and the complainant is requesting action to be taken by the TCEQ. The subject of the complaint may or may not be under TCEQ's jurisdiction. The complainant may or may not be anonymous.

1.2 Confidentiality

As policy, the Agency holds all complainant information confidential. To the extent possible, the TCEQ will hold as confidential complainant identity, and all information that could lead to the identification of a complainant. (Please refer to FODWEB, Investigation Guidance/Post Investigation/File Confidentiality.) (Insert hyperlink) Access to complainants' names and addresses will be generally limited to Agency personnel. Complainant contact information will be documented in CCEDS, but will not be released unless directed by the Attorney General's office in response to an open records request. When conducting investigations resulting from a complaint, the investigator will take all reasonable measures to protect the identity of the complainant. It is the discretion of the investigator and regional management to determine what actions constitute reasonable measures.

Some circumstances may occur in which revealing the complainant's identity is necessary. If the role of the complainant changes (e.g. from complainant to a party to a hearing), the Agency cannot guarantee confidentiality. Additionally, if a complaint results in a formal legal proceeding, the court or administrative law judge may require the complainant's identity to be disclosed. Additionally, in order to substantiate the violations, the complainant's testimony at the legal proceeding may be necessary. The complainant may be required to testify when Citizen Collected Evidence is used in a formal enforcement proceeding and should be advised at the time the evidence is accepted.

Issues regarding confidentiality should be made clear to the person when taking information from the complainant in person or over the telephone. Only if the complainant wants to be anonymous and no record is kept of his/her identity, can the Agency guarantee complete confidentiality. If programmatic issues regarding confidentiality and the investigation of a complaint exist (e.g., nuisance complaints), provide this information to the caller at the time of initial contact.

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Section 2

Pre-Investigation Procedures

2.1 Obtaining Initial Information

The collection of the initial information is key in the effective and efficient investigation of a complaint. A complaint can arrive at the Agency in a variety of formats such as walk-in, telephone, petition, letter, fax, e-mail. Documentation of the information is the same for all these contact methods. The required initial information includes the following:

2.1.1. Where and When?

Where is the alleged activity occurring? Try to get detailed directions to the site (precise street numbers, landmarks, etc.) When does it occur (late at night, only on weekends)? How long has this activity gone on? If the activity happened years ago, what recent occurrence prompted the call (e.g., former employee, illness)?

2.1.2. What?

What is the nature of the problem? Which media does it involve? What is the impact or effect? Does the occurrence constitute an imminent threat to the environment or public safety? Get specific details about what the complainant believes is the problem, including details about the materials, potential hazards, etc. Has the complainant called anyone else regarding this threat (e.g., EPA, local government, media, TDH, RRC)?

2.1.3. Who?

What company or other entity does the complainant think is responsible for the activity and why? What evidence or basis does the complainant have for believing this party is responsible? Get specific details, including names, addresses and phone numbers if available, and the type of activity that may be the source of the problem.

Always repeat all information to assure accuracy. Try to be clear in your questions to the complainant and in what you write down. Get as much information as you can so that the investigator can effectively investigate the complaint. Use of a data entry form is optional. Any data entry forms are not a component of the public file information and may contain confidential information. File or discard the documents according to the SOP on confidential information. Perform data entry into CCEDS as described in the CCEDS User Manual.

2.1.4 Citizen Collected Evidence (Insert hyperlink, Texas Water Code § 7.0025.)

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At times, the complainant may furnish additional information relating to the complaint, including photographs, video tapes, or sample results. This information is to be received and evaluated by the regional office. A Citizen Collected Evidence Log form should be completed to document receipt and evaluation of the evidence. If appropriate, it may be used to substantiate a violation. For more information, refer to the guidance on Citizen Collected Evidence. (Insert hyperlink.)

2.1.5 Confidentiality

Persons recording the complaint information will explain that all complainant information is held confidential to the extent possible. Make it clear to the complainant that confidentiality cannot, however, be guaranteed.

2.1.6 Anonymous Complaints

Confidentiality regarding the identity of the complainant cannot be guaranteed unless the complainant is anonymous; this should be made clear to the person when taking the information. If a complaint is made known to the agency by a complainant who wishes to remain anonymous, the complaint is investigated following the same procedures as any other complaint. Should your programmatic area have regulations that effectively prohibit investigation of an anonymous complaint (e.g., an air nuisance odor) make that clear to the caller at the time of initial contact. Should the caller continue to be anonymous note that in the complaint investigation information.

An anonymous complaint is when contact information is not documented within CCEDS. Provide the caller with the information on how they would obtain results of investigations (e.g., the assigned investigator, copy of the final report, etc.).

2.1.7 Providing Basic Information to the Complainant

During initial contact with the complainant by telephone, be sure to provide a brief outline of the complaint investigation policy and procedure. This would include information regarding confidentiality, the range of time frames possible for a complaint investigation, the possibility of a referral (e.g., local program or county), time frames for reports, etc.

Programs have protocols for the handling of specific types of complaints (e.g., odor, water rights, etc.). See program investigator manuals for additional information.

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2.1.8 Sites with Multiple Complainants

A site can have multiple complaints filed with the Agency. The Agency can receive these complaints by two main methods. First is by a petition, when many persons sign and submit a document enumerating their concerns, and providing each person's name and relevant information. When the Agency receives these types of complaints, CCEDS has a means to note this in the "Number Complaining" field. Only the designated lead on the petition will have the personal information entered into the system. This person will be the recipient of any Agency correspondence regarding the investigation.

The second type of multiple complaints per site occurs when the Agency receives more than one call on the same site, issue or condition, within hours, days or weeks of each other. When this situation occurs, the region may document each complainant in a separate incident, all of which can be associated to a single investigation in CCEDS. Alternately, the region may create a single incident, and should document each complainant, including phone number and address, using the CCEDS Contact Maintenance window, and each communication using the CCEDS Contact Communication Log Maintenance window. The "number of persons complaining" information must also be updated to reflect any additions.

When the Agency receives many individual calls regarding the same condition (i.e., >15 - 20), the Regional Director should contact the Field Operations Division Director regarding the number of complaints. At this point, management must establish a specific plan designed to investigate the complaints effectively. These situations should not be a routine occurrence; field management has the option of specialized handling to adapt to unique situations as they arise.

2.2 Complaint Referrals

Should the complaint belong to another program within the region, either transfer the call to a person (not voice mail) in that program or offer to have that program contact the complainant. If the caller prefers, take the information and provide that information immediately to the appropriate program.

When the complaint is not within TCEQ jurisdiction, provide a contact number for the appropriate agency. Request the complainant contact the appropriate agency. If the complainant prefers that the TCEQ take the information, inform the caller that TCEQ will forward the complaint to the appropriate agency. Refer the complaint immediately and enter it into CCEDS as a referred complaint. When referring the complaint to a Local Air Program (LAP), relay the information to the LAP and the LAP will enter it into CCEDS.

Central Office Field Operations Division or other divisions within the Agency may receive the initial complainant contact. The office receiving the contact may offer to contact the appropriate regional office or suggest that the complainant contact the regional office directly. The regional office will gather the initial CCEDS complaint data entry information. The "received" date is the initial date received by the regional office.

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2.2.1 Local Air Programs, Authorized Agents and Local Governments

There are three categories for regional/local governments with authority to conduct investigations of citizen complaints. These are Local Air Programs (Air and Stage II); Authorized Agents for On-Site Sewage Facilities (OSSF); and local government solid waste projects for which Councils of Government (COG) administer pass-through grants.

When a regional office receives a complaint for which a local air program, authorized agent or local government has jurisdiction or authorization to investigate, the complainant should be provided with a contact number of the appropriate location that will more readily handle their concerns. Should the complainant insist on this agency taking the information, inform the caller that the complaint will be forwarded to the appropriate agency. Refer the complaint immediately. To document the referral to another agency (other than a Local Air Program), enter the data into CCEDS according to the appropriate priority notation for referral to another agency. For Local Air Programs, relay the information to the Local Air Program, who will enter it into CCEDS. At the time of the referral, the Complaints Coordinator or investigator should request a final report from the investigating authority, if such a report is not required by a Memorandum of Understanding.

2.2.1.1. Local Air Program: In some regions, a local governmental authority has been delegated responsibility for responding to complaints within its jurisdiction. In those areas that have such local programs, complaints should be referred to the controlling entity. Local programs will investigate and document complaints according to the guidance provided in this document.

2.2.1.2 Authorized Agent: OSSF Authorized Agent authority is issued by an Agreed Order with the Agency. The Authorized Agents are responsible for responding to complaints within their areas of jurisdiction. The investigations conducted and actions taken by Authorized Agents are not tracked in CCEDS. For further information, refer to the OSSF Investigator Manual.

2.2.1.3. Local Government Solid Waste Program: The 74th Legislative session (1996) produced House Bill 3072 that directed the TCEQ to allocate half its solid waste fee appropriation for grants to local governments. In addition, the bill required the Agency to allocate the solid waste grant funds among the 24 Councils of Government (COGs). The COGs administer pass-through grants for regional and local solid waste projects (i.e., illegal dumping, used oil, etc.). Each regional office maintains a list of local government contacts for complaint referrals.

2.3 Complaints Not Routinely Investigated

There are categories of complaints that the TCEQ does not routinely investigate based on Appendix A.

Complaints for which there is not enough information provided by the complainant to conduct an investigation will be entered as a CCEDS incident, but will not be investigated. These complaints will be closed with explanatory comments.

2.4 Complaint Assignment & Prioritization

Once a complaint has been received by the Agency, the appropriate program/region should assign the complaint a priority and an investigator according to the FODWEB (Insert hyperlink) and the CCEDS Users Manual (Insert hyperlink).

Deadlines for responding to complaints should be assigned using the guidance in Appendix B, and the workload scheduling priorities for incidents from FODWEB. The Section Manager, Team Leader, Work Leader or designee should assign the complaint a priority and an investigator within one working day of receipt. The Section Manager, Team Leader or Work Leader should note any deviation.

2.5 Receipt of Complaint by Investigator

The investigator should receive the complaint the day that the Section Manager, Team Leader or Work Leader assigns responsibility for the investigation. The investigator will enter the initial complaint incident information into CCEDS within five working days after receiving the complaint. For all complaints other than anonymous complaints and Priority 1 incidents, the assigned investigator will attempt to contact the complainant within two (2) working days of his/her assignment to the case, and/or before conducting the investigation.

2.5.1 Definition of Complaint Investigation and Complaint Response

A complaint may include a site visit or a file search. A complaint investigation begins (CCEDS investigation start date) when information is gathered from a file search, verbal inquiry, a site visit, or any combination of the above. This date must be entered into a CCEDS investigation associated with the CCEDS complaint incident to stop the priority deadline clock.

2.6 Preparation/Pre-investigation

As with any investigation preparation, investigator preparation before entering the field is vital. To prepare for a complaint investigation, follow the FODWEB Pre-investigation Section (Insert hyperlink). Complaints do not require prior notice of investigation [see FODWEB Scheduling the Investigation Section (Insert hyperlink)]. For complaints involving nuisance odors, refer also to the Nuisance Odor Protocol (Insert hyperlink).

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Section 3

Site Investigation

3.1 Conducting Complaint Site Investigations

The investigation should be conducted as outlined in the FODWEB Investigation Section. (Insert hyperlink) See Program Manuals for media-specific guidance. See Nuisance Odor Protocol (Insert hyperlink) for nuisance odor complaints.

Follow the same procedure for entrance and exit meetings as required for scheduled compliance investigations.

Multiple investigations on a complaint are possible, but only one investigation can be associated to the complaint incident (see CCEDS User Manual). (Insert hyperlink)

Investigations at isolated locations, MSW unauthorized sites or investigations in emotionally volatile situations pose particular investigator safety concerns. When investigating these situations, having additional field staff, law enforcement, or personnel from other agencies accompany the investigator may be prudent and appropriate.

Should no site representative or complainant be available at the time of the site investigation and the complaint site cannot be found, document the steps taken to find the site and investigate the issue of concern.

3.2 Authority, Access, and Right of Entry

FODWEB Obtaining Access to Investigate Site (Insert hyperlink) includes information on an investigator's authority and right-of-entry. Also included is information on what to do if the owner or operator denies you entry into a site. In particular, the investigator must be aware of certain restrictions:

> **DO NOT** enter property without permission, nor climb over a fence or locked gate. Property boundaries are still boundaries, despite whether the fence is down or the gate is broken.
> **DO NOT** prevaricate or embellish to gain entry.
> **DO NOT** attempt a site visit outside your own region unless authorized by that region.
> **DO NOT** put yourself at risk!

It is important that you observe these restrictions; failure to do so could place you in danger. It could also jeopardize any enforcement if evidence found on a site is tainted or unusable due to illegal entry or misrepresentation.

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3.3 Photograph Policy

FODWEB Additional Investigator Information/Photographic and Digital Records (Insert hyperlink) contains information regarding the policy on photographs.

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Section 4

Post Investigation

4.1 Updating CCEDS

Within three working days after the complaint investigation is begun, regional staff should use the basic information to create an investigation in CCEDS, and associate it with the complaint incident. This will allow tracking of priority deadlines.

4.2 Final Complaint Report

The Final Complaint Report is to be approved in CCEDS within 60 days following the conclusion of the investigation. A complaint investigation is concluded upon receipt of the last information necessary to complete the investigation report. The reviewing supervisor is responsible for assuring the investigation and documentation are complete.

The content of the Final Complaint Report should include how and when the complaint was investigated, who investigated the complaint, the results/findings of the investigation, and how the complaint was addressed. There should be no reference to the complainant (name, location, etc.) in the body of the report nor any description that would identify the complainant. Peer review must ensure that any such information is redacted from the report before supervisor approval in CCEDS.

4.3 Multimedia Complaints

Complaints may involve multiple program areas. Complaint information should be provided to the appropriate section for coordination and possible multi-media investigation.

No adequate means of recording such complaints as "multimedia" currently exists in the CCEDS system unless all the media are investigated by a single investigator and documented in a single investigation. The CCEDS Users Manual Committee is studying this issue and will incorporate resulting process decisions into the CCEDS Users Manual. The Complaints Committee will update this section to refer the reader to the appropriate section of the CCEDS Users Manual. Meanwhile, the investigator or manager should note multimedia complaints, with the investigation numbers, in the description or comment field of the CCEDS Incident Detail window when creating the incident, and in the Investigation Comments window.

If a single investigator conducts investigations in more than one media, multiple program types may be selected and associated for both the incident and investigation.

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4.4 Violation Documentation

The FODWEB section Evaluate Findings (Insert hyperlink) details how to document violations.

4.5 Quarterly Updates

It is a statutory requirement that for every complaint received, the Agency must make written quarterly notifications of investigation status to the complainant(s), and the subject(s) of the complaint, until final disposition of the complaint. The regional office will be responsible for these notifications until final disposition by verification of compliance, or issuance of a Notice of Violation. If the complaint is referred for enforcement (by issuance of a Notice of Enforcement) or litigation, this requirement will become the responsibility of the appropriate division. Retain copies of all Quarterly Update letters in the region files. Handle the complainant Quarterly Updates as confidential documents since they contain complainant information.

4.6 Final Notice

The purpose of the Final Notice is to inform complainants and the subject(s) of complaints of the final disposition of the Agency's investigation of their concerns.

4.6.1 Final Notice to Complainants

The region must notify each complainant in writing of the results of the complaint investigation when the investigation is completed. This may be accomplished by sending a standard cover letter (Insert hyperlink) and a copy of the Final Complaint Report.

4.6.2 Final Notice to Respondents

The region must also notify the subject of the complaint ("respondent") in writing of the results of the complaint investigation when the investigation is completed. This may be accomplished by sending an appropriate letter indicating findings which may include a Notice of Violation or Notice of Enforcement.

Enclose a copy of the complaint brochure (GI 278) with the letters to the complainants and respondents unless one was previously provided. Complaints that do not meet the criteria for investigation will obviously not require a Final Notice Letter.

If for any reason the region cannot provide a Final Notice letter (e.g., the complainant is anonymous or did not provide contact information), the regional investigator should document the reason(s) in the investigation report.

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If, after investigation, the region refers the complaint to another division or to another regulating entity for further action, the region should provide contact information to the complainant in this Final Notice letter.

If the complaint is the result of a petition, the region should provide the Final Notice letter only to the petitioning group's primary contact person.

Retain copies of all Final Notice letters in the region files. Handle the complainant Final Notices as confidential documents due to the complainant information contained on the correspondence.

4.7 Procedure for Continuing Unconfirmed Complaints

Field Operations Division has established a procedure to handle continuing unconfirmed complaints, in which the region has taken all feasible actions and a complainant continues to call the Agency to complain. In this situation, the regional Section Manager will prepare a memo recommending discontinuance of complaint investigations. Submit the memo through the Regional Director to the Field Operations Division Central Office (FOD-CO) for peer review.

4.7.1 Regional Recommendation Memo

The memo and supporting documentation should include the following information:

- Name(s) and address(es) of complainant(s)
- Name and address of the complaint source
- Description of the nature of the complaints
- Number of complaints and complaint investigations
- Date, time and nature of each complaint
- Date, time and summary of complaint investigation results
- Discussion of any enforcement activity related to these complaints
- Discussion of any additional or unusual actions by the region (samples, monitoring, after-hours investigations, etc.)
- Discussion of any actions by the company in response to these complaints.
- Discussion of any additional or unusual circumstances regarding the complainant(s) or the complaint source that contribute to the conclusion that additional investigations are unwarranted.

4.7.2 Central Office Review

FOD-CO will convene an ad-hoc Unconfirmed Complaints Committee to review the recommendation. The team will consist of the Field Operations Assistant Division Director, Field Operations Program Liaison, Regional Section Manager, Enforcement Section Manager, Legal Division Liaison and a representative from the Office of Public Assistance. The team may also include other Agency staff, such as toxicology or sampling staff.

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The team will review the facts of the case and the reasons for the recommendation to cease complaint investigation. If the team reaches a consensus that the region has taken all appropriate actions, and that there is no benefit to continued investigation, the region will cease response to these complaints.

4.7.3 Notification of Complainant

If the review process results in the decision to discontinue response, the Field Operations Division Director will notify the complainant(s) by letter that the Agency has done all it can do, and that it will no longer respond to that individual's complaints against that entity. Typically, this letter will include a commitment by the regional office to conduct periodic surveillance of the facility to ensure continued compliance with Agency rules and regulations. The Field Operations Division Director will also confirm this decision by Interoffice Memo to the Regional Director.

4.8 Closure

A complaint incident is automatically closed in CCEDS when it is associated with an investigation. A complaint investigation may be approved and is considered closed when no further regional action is necessary, when the responsible party is implementing a plan of corrective action, or the case has been referred to the central office for formal enforcement action, or to the Corrective Action Section for remediation and closure. A complaint may be approved and closed even though the violation is not completely resolved and additional contacts and/or follow-ups with the responsible party are required. Complaints should be closed at the earliest possible time.

4.9 Filing and Retention

The routing of complaint reports to Central Records is to be handled according to Records Management Procedures and the Document Coding Chart. Each region is to establish a filing procedure for those working files maintained within each office. Each region's complaint process is to include these filing procedures.

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Appendix A
Complaints Not Routinely Investigated

General

1. Recurring unconfirmed complaints that have been evaluated by the Unconfirmed Complaints Committee as being unsubstantiated in accordance with Field Operations policy

2. Complaints that do not fall under TCEQ statutory jurisdiction

3. Complaints against facilities that have not been built

4. Complaints of stressed vegetation or sick animals without a report from a qualified expert (such as the county extension agent, a veterinarian, etc.) indicating a cause/effect relationship.

5. Complaints where the complainant has not first sought relief from the entity with primary jurisdiction (e.g., Local Programs, Authorized Agents, Local Government).

Air

1. Complaints about odor (Insert hyperlink to Odor Protocol) from mobile sources.

2. Complaints of emissions from non-commercial dusty roads.

3. Complaints of emissions which impacted the complainant while traveling on a public road, and for which health impacts were not alleged.

4. Anonymous nuisance (Insert hyperlink to odor protocol) complaints where an identifiable aggrieved party is necessary to substantiate confirmation of the alleged situation.

5. Complaints of outdoor burning (Insert hyperlink to Outdoor Burning) of yard or household waste (as allowed by outdoor burning rules) at a private residence, and for which health impacts were not alleged.

Water

1. Complaints involving private wells when there is no reasonable cause to believe that there is contamination from off-site.

2. Water rights complaints from non-permitted water rights holders. Refer to the most recent Water Rights program guidance memo (Insert hyperlink).

Waste

1. Complaints of contaminated gasoline

2. Complaints regarding individual dead animals (Insert hyperlink to MSW Investigator Guidance).

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Appendix B
Complaint Prioritization

Complaints should be addressed as soon as possible, within the assigned priority deadlines. Assign priorities using FODWEB-defined workload scheduling priorities (Insert hyperlink) according to the following guidance for complaints

1 - Immediately. An imminent threat to public health, safety or the environment which requires immediate emergency response. Most of these events will be classified as emergency response incidents rather than complaints.
2 - Within one (1) working day. Complaints which are a potential threat to public health, safety or the environment, but which do not require dispatch of Emergency Response personnel.
3 - Within fourteen (14) calendar days. Complaints which have a potential to adversely affect public health or safety.
4 - Within thirty (30) calendar days. Complaints which have a potential to adversely affect the environment.
7 - Complaints which the TCEQ does not routinely investigate, but that need to be tracked. This may include complaints referred to other entities and complaints not routinely investigated, as well as complaints for which insufficient information was provided.

Complaints are prioritized according to the character of the event and its impact on human health and the environment. Management has discretion to alter response times within the prioritization window.

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Complaint Procedures Subcommittee	
Issue No.	2
Key Issue	Nuisance Odor Protocol Report: What recommendations for change, if any, are needed for the draft Nuisance Odor Protocol Review Team report?
	Basis: Need to review, finalize, and implement draft nuisance odor protocol report prior to implementation, Public Comment, Staff Input, and Review of Current Practices.
Other Subcommittees Reviewing Issue	None
Recommendation	The Complaints Subcommittee reviewed the Nuisance Odor Protocol document in its entirety to ensure it addressed and resolved the key issue as it related to timely response and adequate follow through of odor complaints based on previously received public comments, current survey comments, and staff evaluations. Specifically, the team concluded that: (1) the proposed protocol was adequately revised to address the above issues and that the protocol, the FIDO chart, and associated forms should replace the existing nuisance odor investigation protocol; (2) the stakeholder reassessment conclusions and recommendations are still valid and further stakeholder involvement is not necessary at this time; (3) initial and followup training at regular intervals is crucial to effective implementation of the protocol; (4) Citizens Collected Evidence (CCE) applicability continues to exist; (5) the ability to provide odor protocol training to the public upon request would be an effective means to expand the public's knowledge of changes in complaint procedures; (6) the public would benefit from posting the Nuisance Odor Protocol and FIDO Chart on the external Web and from developing a brochure explaining the process for nuisance odor determinations; (7) FOD should periodically review evolving technologies to determine their odor revaluation potential; and (8) FOD should periodically review other states' protocols to determine if TCEQ's protocol is still progressive and cutting edge. The positive implications of the implementation of the Nuisance Odor protocol document (and the FIDO chart) include: (1) greater consistency between and within TCEQ regions and staff, (2) less staff subjectivity, (3) greater responsiveness and objectivity by staff, and (4) not a significant resource increase to implement.
	Basis: The Complaints Subcommittee received a presentation from one of the original Nuisance Odor Protocol (NOP) team members who discussed the process the NOP team employed to develop the revised nuisance odor protocol document and FIDO chart. This individual walked the subcommittee members through the entire document plus attachments and answered all questions satisfactorily to assure the subcommittee that the NOP team had considered all options and avenues when developing the document and FIDO chart.

	The NOP team was organized in February 2003 and worked for eight months to: (1) develop the proposed protocol and FIDO chart, (2) review and ascertain the continued effectiveness of the stakeholders recommendations regarding odor complaint response, (3) explore the types and effectiveness of the evolving technologies for odor complaints response, (4) develop a training regime for FOD field investigators at regular intervals, as well as the for the public upon request, (5) determine that CCE did not need to be modified, (6) review and determine the continued appropriateness of existing guidance to address the issue of nuisance odor violations at CAFOs; (7) review and determine the need to incorporate other states' current practices into the revised protocol; and (8) work with OPRR and OLS to ensure that odor control is taken into consideration in all permit reviews.
	Implementation Impacts: Implementation of the draft Nuisance Odor Protocol Review Team report should: • require no additional LBB measures; • include a copy of the protocol, the FIDO chart, and associated forms being provided to EPA Region VI; • be accomplished by the end of January 2005; • supersede the current Nuisance Odor Protocol being used by the Field Operations Division; • have a minimal implementation cost. Funds will be needed to purchase butanol reference method instruments for the regions and delegated local programs. Followup training of agency staff can be conducted at regularly scheduled training events. There will be an unknown cost associated with the potential training of the public and publication of the brochure.
Other Alternatives	Essentially none, however, the subcommittee did consider and disregarded the following alternatives: (1) discard and rewrite the proposed Nuisance Odor Protocol and FIDO chart - this was considered unproductive and unnecessary as the NOP team, comprised of FOD, MOPs, and legal staff, had thoroughly assessed the needs of the state and the agency, and was better able to determine what would effectively work in the field; (2) continue to use the current protocol - it was determined that the proposed Nuisance Odor Protocol and FIDO chart was a better process because it was less subjective, more objective, and therefore defensible, and would lead to greater consistency in and between the regions; and (3) explore other states' processes/protocols - this was considered unnecessary since one of the directives of the NOP team was to review and consider potential incorporation of other state's protocols when developing the TCEQ revised protocol.
Notes	The Complaints Subcommittee members agreed that this document is inter-related with key issue number 1 - Guidance Document for Field Operations Investigation of Complaints.

Nuisance Odor Protocol Review Team Report

February 1, 2004

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Nuisance Odor Protocol Review
Executive Summary

On March 23, 2003 at the direction of Texas Commission on Environmental Quality (TCEQ) Executive Director Margaret Hoffman, a team was formed to evaluate TCEQ odor complaint investigation procedures to determine whether revisions are necessary at this time given advances in odor detection technology, evolution of issues related to odor regulation, and reconsideration of the historical context of the existing protocol. The team was selected by Ms. Jennifer Sidnell, Director, Field Operations Division, and included staff with extensive experience in nuisance odor investigation and the development of the existing odor investigation policy and procedures. The team was asked to review and evaluate existing documents, make recommendations for changes to the "Odor Complaint Investigation Procedures," and determine the need for the formation of a stakeholders group to investigate the issues related to nuisance odor investigation. The team was also asked to develop an effective ongoing nuisance odor training program for investigators.

In December 1992, Texas Air Control Board (TACB) Chairman Kirk Watson appointed a Task Force on Nuisance Odors to "identify measures by which efforts to protect the public from the effects of offensive odors can be made efficient, more effective, and more equitable." On December 8, 1993, based on recommendations from the Task Force, the Texas Natural Resource Conservation Commission (TNRCC) Field Operations Division published a guidance document, "Odor Complaint Handling Procedures." This document was reissued on November 18, 2002 with primarily administrative revisions.

The team's first task was to review the 1993 Task Force recommendations and evaluate the current status of implementation of those recommendations. It was determined that the recommendations from the Task Force are still appropriate, and that the agency has successfully implemented most of these recommendations.

The team reviewed the existing "Odor Complaint Investigation Procedures" and determined that the overall procedures remained valid and were consistent with the agency's policies and the conclusions of the 1993 Task Force. However the team recommended some updates and clarifications in these written procedures. The team determined that the "Categorization of Odors" chart (contained in the procedures and used to assess whether an observed odor represents nuisance conditions) did not adequately clarify the evaluation that an investigator makes of the four principal attributes of odor (frequency, intensity, duration, and offensiveness--FIDO) when determining nuisance odor conditions. Therefore, the team revised the chart into a decision matrix referred to as the FIDO Chart, specifically emphasizing these odor attributes in a step-by-step process. The team also made administrative updates of the written procedures to reflect current agency organizational structure, etc. The updated "Odor Complaint Investigation Procedures" document (Appendix E) including the "FIDO Chart" will replace the existing procedures document used by field investigators to conduct investigations resulting from nuisance odor complaints.

In order to get input from experienced odor investigators on the updated procedures and FIDO Chart, team members conducted an assessment of several historical or existing nuisance odor cases in their regions to compare it with the existing protocol. These evaluations confirmed that the updated procedures and FIDO Chart clarified the significance of the four FIDO attributes and provided a more complete tool for tracking and charting these attributes over time.

The team felt that agency odor complaint handling procedures, including the updated procedures document and FIDO chart, conformed with the recommendations of the 1993 Task Force and that no additional stakeholder input was required at this time.

The team also addressed several other topics related to odor investigations. Following is a brief description of each of these areas, and the team recommendations.

Odor Detection Technology

Following a recommendation of the 1993 task force, the team reviewed current technology as it relates to odor detection equipment. The first type of equipment reviewed was instrumentation that measures specific compounds know to be odorous. The agency currently utilizes these instruments for compound-specific analysis. It is recommended that the agency develop protocols for this equipment which address procedures and limitations of their use in conducting odor evaluations.

Second, the team reviewed an emerging technology that registers a generalized response to odorous air, rather than measuring specific compounds. It may be possible that this instrument can be "trained" to recognize a specific odor source, or an intensity range for a specific type of odor. The Monitoring Operations Division has purchased one of these instruments, and is currently evaluating it. The team recommends that the Field Operations Division continue to work with Monitoring Operations to evaluate this type of instrument for use in odor evaluation.

The team also reviewed the measurement of odor intensity by the butanol referencing method, which relates the intensity of an odor to a specific known concentration of butanol. The team considers this a promising technique for the measurement of odor intensity, and recommends that the Field Operations Division investigate the feasibility of developing a portable version of this method for use by field investigators. It also recommends that this technique be utilized in training field investigators to understand and recognize odor intensity.

Finally, the team recommends that the Field Operations Division, in conjunction with the Monitoring Operations Division, conduct a periodic review of evolving technologies and their potential for use in the field evaluation of odors.

Permitting/Registration

The team recognizes the impact of a source's operating procedures and controls on the potential for odor emissions, and recommends that the Field Operations Division work with the Office of Permitting, Remediation, and Registration, and the Office of Legal Services, to develop procedures

for periodic review of permit requirements to identify any areas where permit requirements or application review might enhance the control of odorous emissions.

Concentrated Animal Feeding Operations (CAFO)

Because of the close proximity of CAFOs and residential areas in some parts of Texas, and the involvement of the Texas Supreme Court in limitation of the agency's authority to regulate emissions from these types of facilities, the Field Operations Division has established a procedure for central office review of all potential nuisance odor violations at CAFOs. The team determined that this procedure is still valid and appropriate, and recommends no changes to this procedure at this time.

Citizen Collected Evidence

The agency has established procedures for the use of citizen collected evidence in the establishment of an enforcement case. These procedures require that the evidence collected by a citizen be gathered according to agency investigation and data collection procedures. The Odor Protocol documents the procedures to be used by an investigator or a citizen to collect and document information regarding nuisance odor. The team makes no recommendation for changes to this process related to citizen collected evidence.

Training

The team recommends that every investigator who will conduct odor investigations receive training on odor issues and the Odor Protocol prior to conducting such investigations. It is also recommended that all investigators involved in odor investigations participate in periodic refresher training on odor issues and odor investigation. Further, it is recommended that training on odor issues and odor investigation be made available to all field investigators, whether or not their primary job function includes conducting odor investigations.

Nuisance Odor Protocol Review Team Report

Team Tasks and Goals

Due to recent citizen and legislative concerns about emissions from the Northeast Travis County Landfills, Texas Commission on Environmental Quality (TCEQ) Executive Management has requested that the agency's nuisance odor policy and investigation procedures be reviewed. The charge to the team is to review existing documentation and procedures, assess their current applicability, make recommendations for changes to the existing odor complaint investigation procedures, and determine if there is a need for input from external stakeholders to address these issues. The team has also been asked to develop an effective and ongoing nuisance odor investigation training program.

Team Members

Archie Clouse (Lead), Director, El Paso Regional Office; Jim Reed, Technical Specialist, Field Operations Division, Central Office, Austin; Barry Kalda, Air/Waste Section Manager, Austin Regional Office; Robert Ross, Assistant Director, Dallas/Fort Worth Regional Office; Michael Martin, CAFO Investigator, Stephenville Office; Booker Harrison, Senior Attorney, Litigation Division; Salal Tahiri, Air Section Manager, Waco Regional Office; Kim Watson, Air Team Leader, Houston Regional Office; and Dick Flannery, Assistant to the Air Section Manager, Houston Regional Office.

Discussion

In December 1992, Texas Air Control Board (TACB) Chairman Kirk Watson appointed a Task Force on Nuisance Odors to "identify measures by which efforts to protect the public from the effects of offensive odors can be made efficient, more effective, and more equitable." On December 8, 1993, based on recommendations from the Task Force, the Texas Natural Resource Conservation Commission (TNRCC) published a guidance document, "Odor Complaint Handling Procedures" regarding agency procedures for investigating nuisance odor complaints and enforcement of *30 Texas Administrative Code, Chapter 101.4* (nuisance rule). This document was revised and updated in November 2002, and reflects current agency policy and procedures for investigating nuisance odors.

On March 23, 2003, Jennifer Sidnell, at the direction of Executive Director Margaret Hoffman, assembled a team to revisit the odor investigation protocol. This team included staff with extensive

experience in nuisance odor investigation and the development of agency odor investigation policy and guidance.

Process

The team met by teleconference thirteen times beginning March 28, 2003, and ending November 7, 2003. During that period, it also met three times in Austin for two-day work sessions during which it discussed issues and worked on the preparation of the draft report and recommendations. The two primary tasks were 1) an evaluation of the recommendations of the August 1993 "Nuisance Odor Task Force Report to the Texas Air Control Board," and 2) evaluation and revision of the agency's nuisance odor investigation procedures. In addition, the team conducted an evaluation and review of several issues related to odor detection and investigation, including 1) odor detection technology, 2) involvement of New Source Review permitting in odor control, 3) odor issues related to Concentrated Animal Feeding Operations (CAFO), 4) the impact of citizen collected evidence rules and procedures on odor investigations, and 5) training of investigators in odor investigation procedures. In order to evaluate the effectiveness of the proposed new procedures, the team also reviewed several historical odor investigation cases using the proposed new procedures, and used these proposed procedures in conjunction with existing procedures on a trial basis during odor investigations in selected regions.

Summary of Team Recommendations

Assessment of the 1993 Nuisance Odor Task Force Report

The first task addressed by the team was review and assessment of the 1993 "Nuisance Odor Task Force Report to the Texas Air Control Board." The twenty-eight member Task Force agreed on 18 recommendations, and presented alternative options for several issues on which consensus was not achieved.

The team determined that the recommendations of the Task Force are still appropriate, and that the agency has successfully implemented most of these recommendations. It was concluded, therefore, that additional stakeholders input is not necessary at this time.

A copy of the Task Force Report is attached as Appendix A. The team's analysis of this report including the current implementation status of its recommendations is found in Appendix B.

The team's discussion and recommendations regarding each of the recommendations by the 1993 Task Force are incorporated in Appendix B. The team concluded that the issues

evaluated by the 1993 Task Force, and the conclusions and recommendations reached are still valid, and that further stakeholder involvement is not necessary at this time.

Evaluation of Agency Odor Investigation Procedures

Based on the recommendations of the 1993 Task Force report, by memo dated December 14, 1993, the Field Operations Division adopted its first "Odor Complaint Handling Procedures" (Appendix C). This document outlined the procedures an investigator was to follow in response to a complaint, and provided guidance in the subjective determination of whether an observed odor constitutes a nuisance violation. This guidance included a decision-making flow chart based on the statutory definition of nuisance, as well as a "Categorization of Odors" chart which provided a range of descriptions of odor situations from "barely detectable" odors which occur on an intermittent basis to very strong persistent odors which may be considered a nuisance.

This document was updated and revised November 18, 2002 ("Odor Complaint Investigation Procedures"), to reflect administrative changes in the agency, as well as some general changes in Field Operations Division Standard Operating Procedures (FODSOP). The most notable changes include updating the agency name, updating complaint prioritization categories according to FODSOP, and eliminating obsolete references to enforcement timeframes. There were no substantive changes in complaint investigation procedures or the "Categorization of Odors" chart.

The attached revised "Odor Complaint Investigation Procedures" (Appendix E) do not significantly alter the procedures for investigation, but provide an improved tool for evaluation of the four characteristics of odors that must be considered to make a nuisance determination--frequency, intensity, duration, and offensiveness (FIDO). The most significant change is the replacement of the "Categorization of Odors" chart with the "FIDO Chart," which will be used by investigators to evaluate odors during odor complaint investigations. Use and application of this methodology for characterizing odors is discussed in the revised Procedures document.

The team recommends that this revised Odor Protocol including the FIDO Chart and associated forms replace the existing odor investigation protocol.

Technology

Currently there are several types of technology that can assist in the determination of one or more of the odor attributes. The team has reviewed several types of instrumentation and makes the following recommendations:

1. Widely used instruments that measure specific compounds, such as Gas Chromatograph/Mass Spectrometers and flame and photo ionization detectors, and including new instruments that automatically scan for a large number of compounds.
These can help determine odor intensity, odor type (and therefore offensiveness), and odor frequency and duration. These instruments can be helpful in situations where the odorous components consist of a small number of specific gases or aerosols. Often, however, odorous emissions result from a complex mixture of compounds not easily measured by these instruments (e.g., reduced sulfur compounds from sewage treatment plants, or a combination of reduced sulfur compounds and mercaptans from a landfill). These instruments could also be helpful where they do not directly measure the odorous compounds but instead measure a tracer compound that is present with the odorous compounds. However, using the tracer method to determine intensity should only be employed in cases where the relative concentration of the tracer compound and the odorous compounds is constant.

The agency has a number of these types of instruments and the team recommends their use for odor evaluations where appropriate.

The team recommends that protocols be developed for each instrument that deal specifically with procedures and limitations when being used for odor evaluations.

2. Cryano Nose 320 (The Electronic Nose)

The Cryano NoseChip™ or "electronic nose" manufactured by Cryano Sciences is a relatively new type of instrumentation that is currently being evaluated. It does not measure specific compounds, but uses a grid of transistor junctions that are exposed as a group to the odorous air. Each junction reacts differently to a particular set of compounds, creating a unique electrical current. The microprocessor analyzes the combined pattern of responses and produces a fingerprint of the particular combination of gaseous compounds.

The instrument can be "trained" by exposing it to known odor sources (e.g., a set of landfill odors of various intensities or a set of various sources of odor from a wastewater treatment plant). The microprocessor would produce the fingerprints of each source and store them in labeled files. (These sets of files can be uploaded and stored on a computer and downloaded back to the instrument as needed. Therefore unlimited sets of fingerprints can be generated for later use.) If the training is done using a team of experienced investigators, the instrument can be "trained" to develop fingerprints based on a consensus of the intensity and offensiveness of various sources of odors, thus imitating the odor panel approach that is often used and recommended in odor measurement literature.

In actual field use, the instrument could be used to sample the odors from a landfill. The instrument would compare these odors to its set of fingerprints of landfill odors of different intensities and identify the fingerprint most similar to the odor in question, and give a

confidence factor for the match. Thus, in theory, the instrument could be used to help determine the intensity and type of odors.

But, this method is relatively new and, to our knowledge, has never been used for odor investigations. Also, if the instrument proves useful for odor evaluations, significant staff resources would be required to prepare the instrument for each type of odor. However, there could be significant long-term benefit to the successful implementation of this method, even if used only in limited situations, because of the increased objectivity and consistency of the odor investigations.

Monitoring Operations has recently purchased one of these instruments and is currently evaluating it.

The team recommends that Field Operations purchase additional instruments and that FOD and MonOps develop and implement a plan for the testing and evaluation of this method.

3. Butanol Reference Method

The Butanol Reference Method is a method of rating intensity without regard to specific compounds or odor type, which was developed and tested by Texas A&M University in the early 1990s. It was reviewed by the 1993 Odor Task Force and tested by Texas Air Control Board regional offices at that time. The method consisted of an instrument that allowed an investigator to compare in the field the intensity of the subject odor to several known concentrations of 1-butanol. The odor intensity is reported as a standardized concentration in parts per million of 1-butanol.

The method gave reasonably consistent results and provided a way of indicating the human nose's sense of the intensity of the odor, separating intensity from offensiveness. However, the prototype instrument was very cumbersome to transport, set up and use, with large air tanks, mechanical valves, etc.

The team recommends that the butanol reference method be utilized in investigator training as a means of demonstrating the concept of odor intensity, as well as familiarizing the investigators with the varying intensity levels.

The team also recommends that the Field Operations Division and the Monitoring Operations Division investigate the feasibility of developing a portable version of the Butanol Reference Method that could be used for field determination of intensity levels.

4. Future Technology

With constant advances in microprocessor-controlled technology, it is likely that there will be future improvements in the above technologies, and development of other technologies that could enhance odor evaluation.

The team recommends a periodic review of evolving technologies to determine their odor evaluation potential.

Permitting/Registration

Nuisance odors are not necessarily the result of failure by a facility to operate in compliance with applicable regulatory or permit requirements. In many cases, nuisance odors occur even if the facility is operating in compliance with these requirements, but could be avoided if more appropriate odor-directed management practices or emission controls were utilized. Although permits typically require Best Available Control Technology and/or Best Management Practices, these may not always include consideration of controls and practices for odor control rather than compound-specific emission controls. In addition, emission control technology and practices change over time, and may not be subject to review before odor problems occur.

The team recommends that the Office of Compliance and Enforcement continue to work closely with the Office of Permitting, Remediation, and Registration and the Office of Legal Services to ensure that odor control is considered appropriately in permit review in all programs, and to enhance procedures for review of existing permit requirements related to odor control technology and practices.

Concentrated Animal Feeding Operations

Odor from Concentrated Animal Feeding Operations (CAFO) facilities have become problematic in certain areas where agricultural operations and residential areas merge. For purposes of this discussion, "CAFO" refers to any animal feeding operation, regardless of size. Recent trends show that the number and size of Texas CAFOs will continue to rise. Traditionally, anaerobic lagoons have been used to manage runoff and manure generated by CAFOs. As the size and number of these CAFOs has increased, so has the size and number of lagoons. This has created a major problem for people living in close proximity to these operations due to odors and other airborne pollutants associated with these operations.

The F/R cattle ruling by the Texas Supreme Court has significantly impacted the way the agency addresses odor issues at CAFO facilities. Essentially, this decision upheld a district court determination that, in this case, the odor emissions from this feed lot were caused by "natural processes," and were thus exempt from regulation under the Texas Clean Air Act's definition of "air contaminant." Further, the F/R decision established a two-part test to determine whether emissions are from a "natural process." The first test is that the process must be one that "occurs in nature." The second test is that the process must be "affected and controlled by human devices only to an extent normal and usual for the particular area involved."

By memo dated January 9, 2001, the Field Operations Division prescribed a process for review of these cases by a committee of central office staff. This memo is attached as Appendix F. This team evaluated the issue of nuisance odor violations at animal feeding operations, and has determined that this existing guidance is still valid and appropriate.

A regulatory tool available to the investigator is the Air Standard Permit Authorization in the CAFO rules (321.46). This rule requires set-back limits from permanent odor sources to residences, business structures, schools, churches, and public park areas without written consent of the land owner. The CAFO owner must also develop and implement a plan to control odors at a CAFO. The plan will identify all structural and management practices that the owner will employ to minimize odors and control air contaminants at the facility.

Citizen Collected Evidence

The executive director is authorized by statute to initiate an enforcement action based on information provided by a private individual (Tex. Water Code §7.0025; 30 TAC §70.4). The agency developed a program for citizen collected evidence which includes guidance for the collection of evidence, and a web site which discusses this process and provides links to agency protocols, procedures, and guidelines for collecting and submitting evidence. The rule specifies that any information or evidence submitted by a citizen must be collected according to agency protocols and procedures in order to be considered as viable evidence. The "Odor Complaint Investigation Procedures" documents the procedures to be used by an investigator or a citizen to collect and document information related to odor complaints. This document is available on the agency web site.

The team recognizes that there is an existing process and makes no recommendations for changes relating to Citizen Collected Evidence.

Training

In order to provide for increased consistency and objectivity in the investigation of odor complaints, it is essential that investigators participate in a broad-based training program regarding odor issues as well as the revised "Odor Complaint Investigation Procedures." This would include discussion of the issues and recommendations presented in this report, as well as specific instruction on the use of the FIDO chart and other odor investigation tools.

The team recommends that every investigator who will conduct odor investigations receive training on odor issues and the "Odor Complaint Investigation Procedures" prior to conducting any odor investigations. It is also recommended that periodic refresher training on odor issues and odor investigation be made available to all investigators. Furthermore, <u>all</u> investigators should receive basic information concerning the odor investigation procedures.

The team recommends the following components be included in all Annual Air Investigator Training events:

- **General Characteristics of Odors and Sources**
- **Review of Nuisance Rule and History of Odor Issues**
- **Odor Complaint Investigation Procedures**
- **FIDO Chart Use, Forms, and CCEDS Checklists**
- **Discussion and Demonstration of Butanol Reference Method (Relative Intensity)**
- **Demonstration of Cryano NoseChip™ (Electronic Nose)**
- **Case Study, Tabletop Exercise, and/or Field Trip**

Case Studies

Several regions conducted an assessment of the proposed FIDO Chart for the purpose of comparison with existing procedures.

Austin Region –A review of complaints received in the Northeast Travis County Landfills case indicates use of the FIDO chart would have led to an alleged nuisance condition approximately three months earlier than was actually the case. Many of the earliest complaints, starting in December 2001, had the descriptions of "gassy" and "gassy garbage." TCEQ fence line monitoring during January 2002, found Hydrogen Sulfide emanating from the landfills' boundaries.

In this case, due to the documented presence of hydrogen sulfide and the use of the term "gassy" by many complainants, the applicable table on the FIDO Chart would be the one entitled, "Odors Characterized as Highly Offensive." During the Spring of 2002, Austin regional investigators responded to dozens of odor complaints and routinely observed light to moderate odors in the neighborhoods. The observed frequency, intensity, and duration of this highly offensive odor would have resulted in a pattern on the FIDO Chart that would indicate a nuisance condition exists. In this case, the agency would likely have alleged a violation in January instead of April.

Dallas/Ft. Worth Region –The new FIDO chart has been taken to the field for all odor investigations since July 2003. The region feels that the chart concepts will allow the region to develop a team/project approach for problematic odor situations; for example, where it is difficult to determine by a single investigator during one or two investigations whether or not the odor impacts represent a nuisance odor condition. The use of the FIDO Chart and revised protocol promotes the development of a plan of investigations, odor logs, source process determinations, etc., to efficiently determine the pattern and impact of odors. These problematic odor situations have historically consumed a significant amount of regional resources when the situation cannot be successfully concluded but, because of continuing complaints, must still be investigated on a reoccurring basis.

El Paso Region –The El Paso Regional Office conducted an assessment of how the new FIDO Chart would have affected odor investigations/enforcement at a rendering plant in the town of Vinton in the El Paso Region.

A rendering plant in Vinton has been the source of numerous odor complaints for about 4 years beginning in 1999. Using the existing odor investigation protocol, the company was cited for multiple nuisance odor violations resulting in enforcement action including agreed orders with significant penalties. The violations were based on individual recurring highly offensive odor incidents in which investigators determined a nuisance condition on the spot. In these cases, making a decision regarding the existence of a nuisance odor was easy due to the strength and offensive nature of the odor. Use of the FIDO chart in this case would also have confirmed nuisance odor violations.

In this case study, the FIDO Chart tracked well with the observations made and would have provided an even better tool to document the frequency and duration of the odors. The use of the chart also accurately categorized the type of odor as offensive and simplified the process for determining a nuisance.

Houston Region--An assessment was made of how the new FIDO Odor chart would have affected odor investigations and enforcement performed at a hog farm in the town of New Caney, Montgomery County.

A hog farm in New Caney has been the source of numerous odor complaints since September 2001. Using the existing odor investigation protocol, the owner of the hog farm has been issued four nuisance odor violations that resulted in enforcement action, including an Agreed Order with technical requirements and penalties. All of the violations were based on recurring, highly offensive hog odors, in which the investigators determined a nuisance condition. During these investigations, determining the existence of nuisance odors was made easy due to the intensity, duration, and nature of the odor.

An assessment of these field investigations and violations using the FIDO Chart was conducted. It was determined that the odors documented during these investigations would have resulted in a confirmed nuisance. The chart would have provided an effective tool for documenting the frequency, intensity, duration, and nature of the odors, and would have simplified the process of determining the presence of a nuisance condition.

The experiences of the case studies indicate that the use of the FIDO Chart will enhance the regions' ability to effectively and consistently assess nuisance odors. Investigators also reported that the use of the Chart provided a systematic approach and more confidence in assessing nuisance odors.

Appendix E

Odor Complaint Investigation Procedures

February 1, 2004

February 1, 2004

Texas Commission on Environmental Quality
ODOR COMPLAINT INVESTIGATION PROCEDURES

The following updates and supersedes the previous version of this document dated November 13, 2002, as well as all other guidance related to odor complaint investigation.

This narrative accompanies the attached flow chart which describes the prescribed process.

DETECTION OF ODOR AND INITIAL RESPONSE

Detection

An odor may be detected by a citizen and reported to a Texas Commission on Environmental Quality (TCEQ) regional office as a citizen complaint, or detected by an investigator without a citizen complaint as the initiating factor. In either case, the regional office should promptly make a determination regarding the appropriate action based on the guidelines below. If an investigation is appropriate, the investigation should be conducted according to the procedures specified in this document and the attached flow chart.

Initial Response

If an odor is detected, and adverse health effects are alleged by a complainant, or suspected by the investigator, it should be prioritized for immediate response, and an investigation should be conducted as soon as possible, regardless of the manner of detection. The definition of "alleged" or "suspected" health effects should remain very broad in this situation, to ensure that appropriate actions are taken any time there is a potential imminent threat to public health and safety.

If an odor is detected by either a complainant or an investigator, and adverse health effects are not alleged or suspected, an investigation should be conducted to determine the cause of the odor (or alleged odor) according to the incident prioritization procedures established by the Field Operations Division.

INVESTIGATION/DATA GATHERING

Following is a brief discussion of the information which should be collected and evaluated by the regional staff in a potential nuisance odor situation. This discussion is not intended to restrict the collection of any information which the investigator considers appropriate or necessary to evaluate the citizen concerns.

It should be noted that the following protocol assumes that the investigation was initiated by receipt of an odor complaint from a citizen. In order to successfully pursue a nuisance violation, there must be an identifiable aggrieved party (complainant).

If the investigation is initiated as the result of detection of an odor by an agency investigator (no complainant), or if the complainant requests anonymity, the purpose of the investigation would be to determine the cause of the odor and require corrective actions, if appropriate, rather than to confirm nuisance conditions. If, however, during the course of an investigation that was initiated by the investigator, an aggrieved party is identified, the investigator should proceed with the following investigation protocol to document the presence or absence of nuisance odor.

Complaint Information

The following information should be gathered by the regional office at the time that a complaint is received by telephone. If the complaint is received in some other manner, this information should be collected prior to the investigation.

- Name(s) and address(es) of complainant(s).
- Location where complainant(s) experienced the odor.
- Dates, times, frequency, and duration when the complainant(s) experienced the odor.
- Nature of any allegation of adverse effects on the complainant's health, property, animals, or vegetation.
- Nature of any allegation of interference with the normal use and enjoyment of the complainant's property, animals, or vegetation.
- Alleged source of the odor.

Investigation Data/Information

All odor complaint investigation activities and results should be documented in the investigation report. The items and discussion below should be included in the investigation, but should not be construed as limiting either the collection or reporting of relevant information.

- Attempt to locate and assess the odor first-hand. It would be ideal if an investigator could be at the complainant's location at the time that the odor is occurring, in order to experience the same conditions that generated the complaint. This may not be possible, but an effort should be made

to duplicate the experience of the complainant, unless the conditions are considered potentially unsafe.

- Describe the intensity and offensiveness of any odors observed during the investigation using the terms identified for those factors on the FIDO Chart (copy attached). ("FIDO" is an acronym for Frequency, Intensity, Duration, and Offensiveness).

- Describe any physical effects experienced by the investigator which are indicative of adverse effects upon health (burning eyes, nose, throat, headache, vomiting, etc.)

- Describe the normal use of property affected by the odor, and the manner in which such odor could reasonably be expected to interfere with this use.

- Determine and document the extent of the odor plume. Document on a map of the vicinity the odor survey route, the time the investigator was at each location, and the odor observations at each location. This survey should include upwind and downwind observations at least.

- Attempt to locate the source(s) of the odor.

- If a source is identified, attempt to locate the specific cause of the odor (i.e., the specific compound, equipment, or process emitting the odor, and the reason(s), such as a plant upset).

- Gather local meteorological data for the time when the complainant(s) alleged the occurrence of the odor, as well as the time when the investigation was conducted. This should include, at a minimum, estimates of wind speed and direction, temperature, humidity, precipitation, and sky cover.

- Describe the terrain features of the area, including natural and man-made features which could influence the flow of air.

- If the investigator has detected odors at the same location at other times, document a comparison of the current observations with the prior observations.

- Collect information about the frequency and duration of any observed odors. This includes observations by the investigator during the course of the investigation, and information provided by the complainant or the source relative to these factors.

- In some cases, such as recurring short-term odor situations, the investigator may ask the complainant to maintain a log of odor observations to document conditions related to the odors experienced. The complainant should be asked to utilize the same terminology as used on the FIDO Chart.

This log can be used to validate or invalidate complaints in conjunction with the other evidence of the case. It would not be used as the sole basis for issuance of a notice of violation. The attached "Odor Log" format should be used in all such situations.

- The investigator may conduct interviews of other citizens in the area surrounding the complainant's location with the intention of gathering information or evidence to assist in a determination of the validity of the complaint. Caution should be taken, however, to ensure that this information-gathering procedure not be construed as "soliciting" additional complaints.

INVESTIGATION FOLLOWUP

Upon completion of the investigation, the information collected should be reviewed to determine whether a nuisance condition is confirmed. Based on statutory and regulatory language, a nuisance odor exists if an odor has been emitted in such concentration and duration as to a) be injurious to or adversely affect human health, welfare, animal life, vegetation, or property, or b) interfere with normal use and enjoyment of animal life, vegetation, or property. In the first case, if any adverse effect or injury is documented, the source should be required to take measures to mitigate the odor, and the regional office should initiate appropriate enforcement action against the responsible party. If such adverse effects or injury are not confirmed, the FIDO Chart would be used to evaluate the frequency, intensity, duration, and offensiveness of the odor, and to determine whether the evidence in the case constitutes a nuisance violation.

Adverse Impacts

If the preponderance of the evidence collected during the course of the investigation (including discussions with the complainant and observations by the investigator) confirms the presence of odors in such concentration and duration as to be injurious to or adversely affect human health, welfare, animal life, vegetation, or property, remedial action should be immediately required to mitigate the odors, and appropriate enforcement action should be initiated according to agency enforcement procedures. In this situation, these actions should be taken regardless of whether the incident was complaint-generated or detected by the investigator.

Interference with Normal Use and Enjoyment of Animal Life, Vegetation, or Property

If the preponderance of the evidence does not confirm the presence of odors in such concentration and duration as to be injurious to or adversely affect human health, welfare, animal life, vegetation, or property, the investigator should evaluate all the evidence collected during the course of the investigation using the FIDO Chart. This chart is used to determine whether a nuisance odor violation should be issued based on whether the frequency, intensity, duration, and offensiveness of

observed and documented odors combine to cause interference with the normal use and enjoyment of animal life, vegetation, or property.

Each of the four tables on the FIDO Chart represents a level of offensiveness (Highly Offensive, Offensive, Unpleasant, and Not Unpleasant). The intensity of the observed odor is documented using the legend on the right side of the chart, with "VS" representing Very Strong odors, "S" for Strong, "M" for Moderate, "L" for Light, and "VL" for Very Light. The frequency and duration are then plotted on the horizontal and vertical axes of the appropriate table. If the odor situation is at least as intense as the colored block in which it is plotted, it is considered a nuisance odor. If the plot falls outside the colored area of the table (NA), the odor does not represent a nuisance.
Intensity and offensiveness are two distinct factors which should be evaluated separately. Offensiveness is the enate character of the odor which can be distinguished even in very light concentrations. Intensity is the relative measure of the perceived concentration. Investigators learn to determine relative intensity through experience and/or training. The FIDO Chart incorporates these two distinct factors along with frequency and duration into one integrated tool.

If application of the FIDO Chart confirms a nuisance odor (confirms odors in such concentration and duration as to interfere with the normal use and enjoyment of animal life, vegetation, or property), the regional office should require the responsible party to correct the problem, issue a nuisance odor violation, and initiate appropriate enforcement action based on agency enforcement procedures.

EXAMPLE APPLICATION OF THE FIDO CHART DURING ODOR COMPLAINT INVESTIGATIONS

Following are brief discussions of example nuisance odor complaint investigations, and use of the FIDO Chart to evaluate whether or not nuisance conditions should be cited.

Example 1–Rendering Plant Odor

Scenario 1

A citizen complaint is received alleging "horrible odors" from a nearby rendering plant that occur almost every morning about 10:00 a.m., and last for about an hour. The investigator discusses this with the complainant and arranges to conduct an investigation at 10:00 a.m the following morning. Upon arrival at the complainant's residence, the investigator notices the odor which is consistent with improperly treated wastewater from a rendering plant. Further investigation confirms that the rendering plant less than 1/4 mile away is the source of the odor. By 11:00 a.m., the odor has almost completely gone away.

Using the FIDO chart, the investigator characterizes the odor as Highly Offensive, as indicated in the "Odor Characterization Examples" on the back of the chart, and determines that the intensity is

Strong. Based on testimony from the complainant, and on-site observation, the investigator determines that the odor only lasts for about an hour. The FIDO chart indicates that a Highly Offensive odor lasting for about an hour in a single occurrence must be at least Very Strong to be considered a nuisance (see Figure 1). No violation is confirmed at this time.

ODORS CHARACTERIZED AS HIGHLY OFFENSIVE

DURATION	FREQUENCY: Single Occurrence	Quarterly	Monthly	Weekly	Daily
1 minute	NA	NA	VS	S	M
10 minutes	NA	VS	S	M	L
1 hour	VS	S	M	L	VL
4 hours	S	M	L	VL	VL
12 hours+	M	L	VL	VL	VL

Figure 1

However, based on testimony from the complainant that this strong odor occurs almost every day, usually about the same time, the investigator goes to the rendering plant and discusses this situation with the operations manager. It is determined that a process which is conducted at about this time every day is responsible for the odor.

Given all the evidence gathered in this investigation, it is determined that a Strong, Highly Offensive odor is likely to affect the complainant on almost a daily basis under the plant's current operating conditions. Review of the FIDO Chart shows that a Strong, Highly Offensive odor which lasts for about an hour only has to occur as often as quarterly to be considered a nuisance and justify a Notice of Violation. The Chart also shows that a Highly Offensive odor only has to have a Very Light intensity to be considered a nuisance if it occurs for an hour on a daily basis (see Figure 2).

ODORS CHARACTERIZED AS HIGHLY OFFENSIVE

DURATION	FREQUENCY: Single Occurrence	Quarterly	Monthly	Weekly	Daily
1 minute	NA	NA	VS	S	M
10 minutes	NA	VS	S	M	L
1 hour	VS	S	M	L	VL
4 hours	S	M	L	VL	VL
12 hours+	M	L	VL	VL	VL

Figure 2

The investigator therefore concludes that this citizen has been subjected to a nuisance odor, and determines that a Notice of Violation is appropriate.

Scenario 2

If, during the course of the investigation, it is determined that the Strong, Highly Offensive odor occurs every two or three weeks, sometimes for only 10 or 15 minutes, sometimes for up to an hour, the investigator would need to "read between the lines" on the chart to estimate where the frequency and duration of this odor should be placed. In this case, the chart indicates that a Strong, Highly Offensive odor occurring for 10 minutes on a monthly basis would constitute a nuisance, or that it would only have to occur for one minute at a time on a weekly basis to be considered a nuisance. Since this odor has been documented to occur for between 10 minutes and an hour, and occurs more often than monthly, but less often than weekly, it would be reasonable to conclude that the odor is a nuisance.

Example 2 – Auto Body Shop Paint Odor

Scenario 1

A complainant alleges "paint odors" from a nearby auto body shop are so strong and unpleasant that he can't go in the back yard to play with his kids. He says that normally the odors from the body shop are not a problem, but that since about 8:00 a.m. on this day, they are terrible. An investigator arrives to conduct an odor complaint investigation at 11:00 a.m.

The investigator determines that organic solvent odors from the painting operation, categorized as Offensive according to the "Odor Characterization Examples" on the back of the FIDO Chart, are impacting the complainant's property with a Strong intensity. The odors continue for one more hour, until 12:00 p.m.

During the investigation at the facility, it is determined that a fork lift operator had accidentally knocked off the paint spray booth stack the night before and when painting began that morning the solvents were being emitted at ground level without the dilution afforded by the tall stack. At 12:00 p.m., the plant manager agrees to discontinue the painting process until the stack is repaired.

Application of the FIDO Chart for this one-time odor event (Frequency = Single Occurrence) indicates that an odor characterized as Offensive, with intensity characterized as Strong, with a duration of four hours, does not represent a nuisance. The FIDO Chart indicates that a single occurrence of an Offensive odor for four hours must be at least Very Strong to constitute a nuisance violation (see Figure 3 on next page).

ODORS CHARACTERIZED AS OFFENSIVE

DURATION	FREQUENCY: Single Occurrence	Quarterly	Monthly	Weekly	Daily
1 minute	NA	NA	NA	VS	S
10 minutes	NA	NA	VS	S	M
1 hour	NA	VS	S	M	L
4 hours	VS	S	M	L	VL
12 hours+	S	M	L	VL	VL

Figure 3

Scenario 2

The complainant states that the odors from the nearby auto body shop are not real strong, but that they happen just about every day, and usually last for about an hour. The odor is annoying because it is so frequent. When the investigator arrives, there are no odors present.

Investigation at the facility reveals that most of the work at the shop does not involve painting, and that they "batch" each day's painting, resulting in perhaps an hour or so of painting each day.

Several investigations are conducted over the next few weeks. During two of these investigations painting operations are being conducted, and Light to Moderate odors are confirmed at the complainant's property for an hour or a little more.

Application of the FIDO Chart indicates that odors characterized as Offensive, with Light intensity, which impact the complainant for approximately one hour (duration) on a daily basis (frequency), do represent a nuisance violation (see Figure 4).

ODORS CHARACTERIZED AS OFFENSIVE

DURATION	FREQUENCY: Single Occurrence	Quarterly	Monthly	Weekly	Daily
1 minute	NA	NA	NA	VS	S
10 minutes	NA	NA	VS	S	M
1 hour	NA	VS	S	M	L
4 hours	VS	S	M	L	VL
12 hours+	S	M	L	VL	VL

Figure 4

Scenario 3

The complainant states that strong paint odors from the auto body shop aere experienced occasionally throughout the day about one day a week. They usually only last about 10 or 15 minutes at a time, but that on the days when they do occur, they become very annoying. When the investigator arrives to conduct an investigation, there are no odors observed, but the complainant indicates that the wind has shifted and the odors have disappeared. An odor survey confirms Strong, Offensive odors from the spray painting operation at a point downwind of the facility at the same distance as the complainant's house.

Investigation of meteorological conditions indicates that the complainant's residence is not downwind of the body shop according to prevailing wind direction, but that when the complaint was made, the residence was downwind of the facility. It also confirms that, typically, the complainant's house is downwind of the facility about one day each week.

Investigation at the facility reveals that painting occurs off and on during every work day and that there is only a short paint spray booth stack, thus limiting dispersion. The investigator concludes that Strong, Offensive odors are likely to impact the complainant any time painting operations are underway and the residence is downwind of the facility.

Review of the information collected during this investigation, and application of the FIDO Chart, indicates that the offensive painting odors are impacting the complainant's residence for 10 to 15 minute periods throughout any day when the orientation of the wind puts the residence downwind of the body shop. The frequency of this occurrence would be plotted as Weekly, since the wind direction causes the odors to impact the complainant's residence approximately weekly. The duration is at least 10 minutes (likely more) on these days. The FIDO Chart (See Figure 5) indicates that an Offensive odor with a Strong intensity on a weekly basis for 10 minutes or more is considered a nuisance. A notice of violation is therefore issued.

ODORS CHARACTERIZED AS OFFENSIVE

DURATION	FREQUENCY: Single Occurrence	Quarterly	Monthly	Weekly	Daily
1 minute	NA	NA	NA	VS	S
10 minutes	NA	NA	VS	S	M
1 hour	NA	VS	S	M	L
4 hours	VS	S	M	L	VL
12 hours+	S	M	L	VL	VL

Figure 5

Example 3 – Landfill Odor

Scenario 1

A complainant alleges "sickeningly sweet" garbage odors from a nearby landfill that are sometimes so bad he cannot spend any time in his yard. He adds that sometimes it is so bad he cannot open the windows of his house since the smell would come inside. The odors tend to be worse when the weather is quite cool and calm, especially in the late evening and early morning hours.

Using this information, the investigator determines that an investigation should be conducted after-hours. The investigator arrives in the complainant's neighborhood at 6:00 a.m. on a cool and calm morning, when the odors should be at their worst. No odors are noted at the complainant's address but during a drive through the neighborhood, the investigator notes garbage odors of Moderate intensity in various parts of the neighborhood until about 7:00 a.m. The odors diminish rapidly after the sun has risen and the winds have picked up.

Using the FIDO Chart, the investigator characterized the odor as Offensive, as indicated in the "Odor Characterization Examples" on the back of the chart. Plotting it as a Single Occurrence for one hour, no nuisance is confirmed (See Figure 6). The chart indicates that for a Single Occurrence, an odor must be at least Very Strong for four hours to be considered a nuisance, so no violation is documented. However, the chart also indicates that a Moderate odor occurring for one hour on a weekly basis would be considered a nuisance. The investigator would need to conduct additional investigations and collect additional information regarding the frequency and duration of these odors to make a final determination.

ODORS CHARACTERIZED AS OFFENSIVE

DURATION	FREQUENCY: Single Occurrence	Quarterly	Monthly	Weekly	Daily
1 minute	NA	NA	NA	VS	S
10 minutes	NA	NA	VS	S	M
1 hour	NA	VS	S	M	L
4 hours	VS	S	M	L	VL
12 hours+	S	M	L	VL	VL

Figure 6

Scenario 2

During the course of the investigation, the investigator determines the intensity of the odor is Light and that it lasts approximately 10 minutes. Three followup investigations during the next three weeks result in:

1. No odors detected.
2. An odor of light intensity that lasts for less than 10 minutes.
3. An odor of very light intensity that lasts for about two hours.

The conclusion is that the odors occur for between 10 minutes and 2 hours at a Light to Very Light intensity on a weekly basis (approximately).

Evaluation of the FIDO Chart indicates that an offensive odor occurring weekly for one hour would have to be at least a Moderate intensity to be considered a nuisance (See Figure 7). For an offensive odor at a Light intensity, the odor must have a duration of at least four hours on a weekly basis, or one hour on a daily basis to be considered a nuisance. In this case, although some odor is frequently observed, the intensity and duration are not great enough to confirm that a nuisance condition exists.

ODORS CHARACTERIZED AS OFFENSIVE

DURATION	FREQUENCY: Single Occurrence	Quarterly	Monthly	Weekly	Daily
1 minute	NA	NA	NA	VS	S
10 minutes	NA	NA	VS	S	M
1 hour	NA	VS	S	M	L
4 hours	VS	S	M	L	VL
12 hours+	S	M	L	VL	VL

Figure 7

Scenario 3

A complaint is received alleging that landfill odor is occurring in the neighborhood again, as it does on a regular basis. Review of the file indicates that such complaints have been received and investigated 16 times in the previous 12 month period, at least once per month. Further review indicates that investigators have confirmed Moderate to Strong odors occurring for approximately one hour on four different occasions. Review of complaint records, including odor logs kept by complainants, provides documentation that Moderate to Strong landfill odors are occurring in this neighborhood on about a monthly basis for 30 minutes to an hour at a time.

Using the FIDO Chart for Offensive odors, it is determined that an odor occurring on a monthly basis for one hour at a time must have at least a Strong intensity to be considered a nuisance. The same odor with a Moderate intensity would have to occur on a weekly basis to be considered a nuisance

(See Figure 8). Since the documented odors are only Moderate to Strong (not consistently Strong), and their duration is usually less than one hour, a nuisance violation is not confirmed.

ODORS CHARACTERIZED AS OFFENSIVE

DURATION	FREQUENCY: Single Occurrence	Quarterly	Monthly	Weekly	Daily
1 minute	NA	NA	NA	VS	S
10 minutes	NA	NA	VS	S	M
1 hour	NA	VS	S	M	L
4 hours	VS	S	M	L	VL
12 hours+	S	M	L	VL	VL

Figure 8

ODOR COMPLAINT INVESTIGATION PROCEDURES

FIDO CHART

ODORS CHARACTERIZED AS HIGHLY OFFENSIVE

DURATION	FREQUENCY: Single Occurrence	Quarterly	Monthly	Weekly	Daily
1 minute	NA	NA	VS	S	M
10 minutes	NA	VS	S	M	L
1 hour	VS	S	M	L	VL
4 hours	S	M	L	VL	VL
12 hours+	M	L	VL	VL	VL

ODORS CHARACTERIZED AS OFFENSIVE

DURATION	FREQUENCY: Single Occurrence	Quarterly	Monthly	Weekly	Daily
1 minute	NA	NA	NA	VS	S
10 minutes	NA	NA	VS	S	M
1 hour	NA	VS	S	M	L
4 hours	VS	S	M	L	VL
12 hours+	S	M	L	VL	VL

ODORS CHARACTERIZED AS UNPLEASANT

DURATION	FREQUENCY: Single Occurrence	Quarterly	Monthly	Weekly	Daily
1 minute	NA	NA	NA	NA	VS
10 minutes	NA	NA	NA	VS	S
1 hour	NA	NA	VS	S	M
4 hours	NA	VS	S	M	L
12 hours+	VS	S	M	L	VL

ODORS CHARACTERIZED AS NOT UNPLEASANT

DURATION	FREQUENCY: Single Occurrence	Quarterly	Monthly	Weekly	Daily
1 minute	NA	NA	NA	NA	NA
10 minutes	NA	NA	NA	NA	NA
1 hour	NA	NA	NA	NA	VS
4 hours	NA	NA	NA	VS	S
12 hours+	NA	NA	VS	S	M

INTENSITY LEGEND
VS
Very Strong
S
Strong
M
Moderate
L
Light
VL
Very Light

TCEQ

ODOR CHARACTERIZATION EXAMPLES

Highly Offensive	Offensive	Unpleasant	Not Unpleasant
Blood Drying Operations	Paper Mill Black Liquor	Well Digested or Chemically-Treated Sludge	Ketones, Esters, Alcohols
Undigested or Untreated Sewage Treatment Primary Sludge	Landfill Garbage/waste	CAFO under Best Mgmt. Practices	Fresh-cut Grass or Hay
Rendering Plant Processes and Wastewater	CAFO Lagoon Maintenance, Waste and Wastewater Handling	Waste-activated Sludge Processes	Normal Coffee Roasting
Decaying Animal/fish	Decaying Silage/ composting	Water-based Painting	Normal Food Preparation
Hide Processing	Typical Grease Trap Odor	Styrene	Bakery
Rancid Grease	Rubber/plastic/tire Burning	Gasoline, Diesel Fuel	Perfume
Acrolein	Organic Acids	Diesel Exhaust	Spice Packaging
Landfill Gas and Leachate	Aldehydes	Asphalt Odors	Winery
H_2S	Acrylates	Domestic Waste Burning	
	Septic Systems	Burned Coffee/food	
	Organic Solvents (Oil- based) Painting	Ammonia	
		Chlorine	
		Brush/wood Burning	

DETERMINING FREQUENCY/DURATION

Plant Processes
Constant, seasonal, intermittent (e.g. reactor top opened), upset condition, etc.
Process and environmental controls
Best Management Practices
Sampling/CEM data

Weather
Wind rose from source to receptor
Temperature variation affecting intensity vs climate data
Wind speed day, night, summer, winter
CAMS Station/NWS data

Terrain
Low areas/channels/valleys where odors can funnel
Changes that could affect local wind patterns

Complainant Information
Statements as to frequency, duration, intensity and character
Statements as to effects - how have odors interfered with normal use and enjoyment of property
Logs - time, effects, source operations, weather conditions
Knowledge of source operations - times, processes
Neighbor corroboration
Guest corroboration

HOW TO USE THE FIDO CHART

Each of the four tables on this FIDO Chart represents a level of offensiveness (Highly Offensive, Offensive, Unpleasant, and Not Unpleasant). The intensity of the observed odor is documented using the legend on the right side of the chart, with "VS" representing Very Strong odors, "S" for Strong, "M" for Moderate, "L" for Light, and "VL" for Very Light. The frequency and duration are then plotted on the horizontal and vertical axes of the appropriate table. If the odor situation is at least as intense as the colored block in which it is plotted for the corresponding duration and frequency, it is considered a nuisance odor. If the plot falls outside the colored area of the table (NA), the odor does not represent a nuisance.

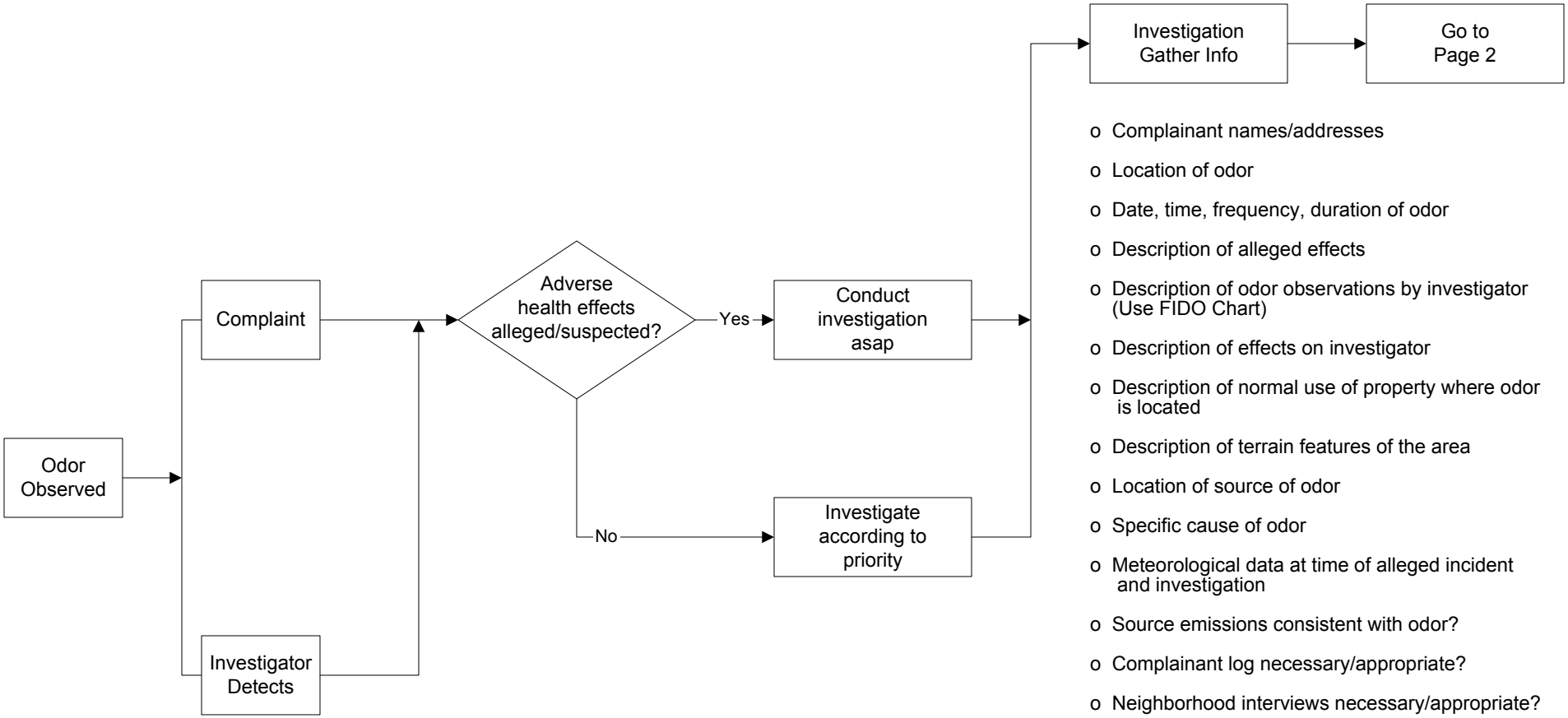
Use checklist to document the following:

1. Characterize the odor to determine which offensiveness table to use (Not Unpleasant to Highly Offensive)
2. Assess intensity of odor (Very Light to Very Strong)
3. Determine the total duration of the odor(s) (1 minute to 24 hours)
4. Evaluate the frequency of odor occurrence (Single Occurrence to Daily)
5. Using Steps 1-4 above including previous investigation results, identify the block that corresponds with the information collected in order to determine if a nuisance condition exists.

ODOR LOG

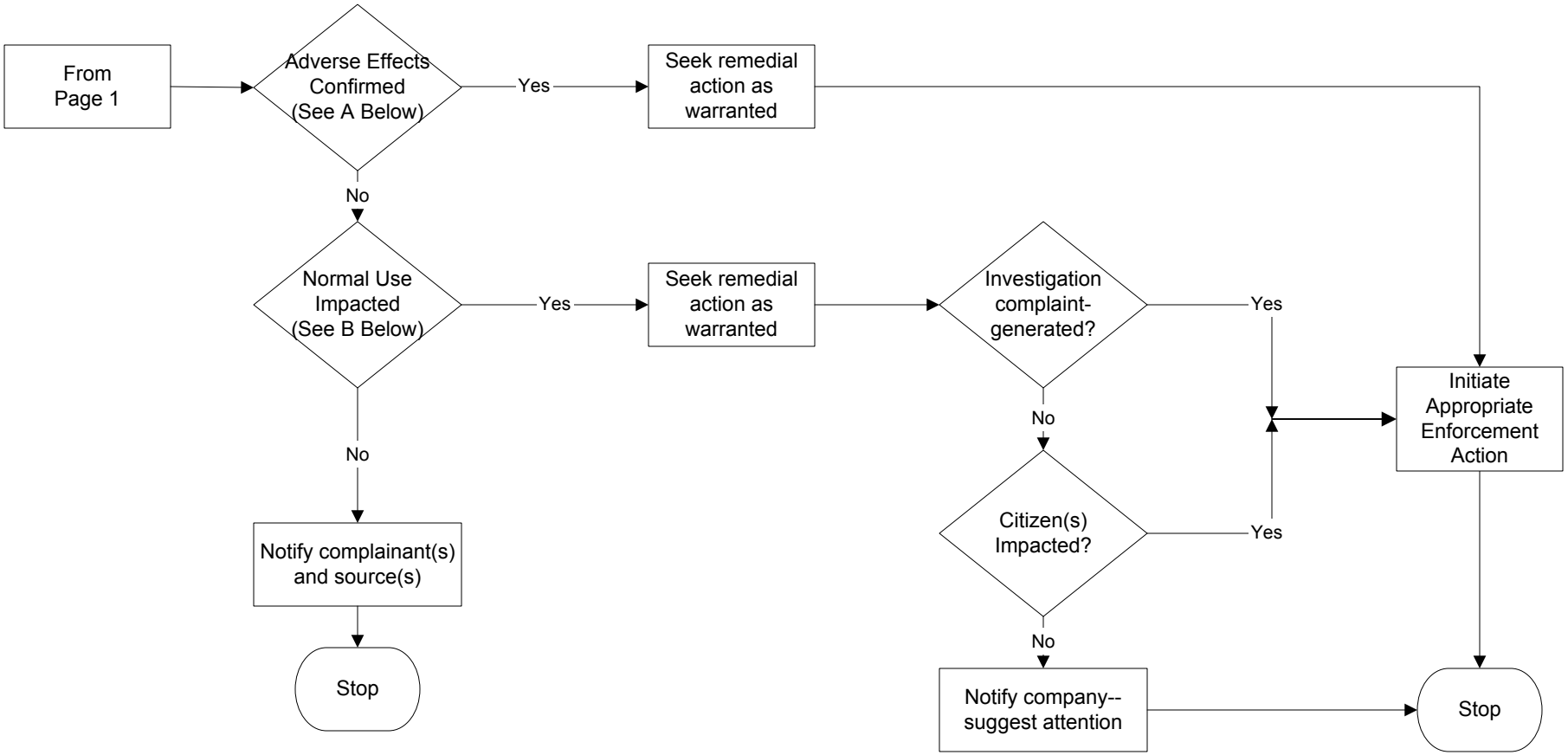
Dates and Times	Weather Conditions (wind direction/speed,	Odor Category (1 through 5)	Symptoms/Effects (nausea, headaches,

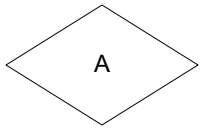
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Nuisance Odor Complaint Investigation Process



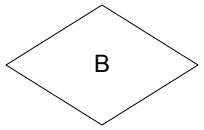
- o Complainant names/addresses
- o Location of odor
- o Date, time, frequency, duration of odor
- o Description of alleged effects
- o Description of odor observations by investigator (Use FIDO Chart)
- o Description of effects on investigator
- o Description of normal use of property where odor is located
- o Description of terrain features of the area
- o Location of source of odor
- o Specific cause of odor
- o Meteorological data at time of alleged incident and investigation
- o Source emissions consistent with odor?
- o Complainant log necessary/appropriate?
- o Neighborhood interviews necessary/appropriate?
- o Additional odor observation/measurements necessary/appropriate?
- o Documentation of investigation results

Nuisance Odor Complaint Investigation Process (cont'd)





Preponderance of evidence (investigation results) indicates odor in such concentration and duration as to be injurious to or adversely affect human health, welfare, animal life, vegetation, or property.



Preponderance of evidence (investigation results using FIDO Chart) indicates odor in such concentration and duration as to interfere with normal use and enjoyment of animal life, vegetation, or property.

Complaint Procedures Subcommittee	
Issue No.	**3**
Key Issue	**<u>Complaint Reporting</u>:** How can the TCEQ process for receiving complaints be improved, including accessibility 24-hours via telephone and agency website?
	Basis: Public Comment
Other Subcommittees Reviewing Issue	Communications
Recommendation	The terminology on the agency Web site "Reporting an Environmental Problem" should be changed to "Environmental Complaint"; The agency homepage and the Field Operations homepage should have a direct link to the "Environmental Complaint" page; The "Environmental Complaint" page should provide: • the 888-777-3186 (Environmental Violations Hot Line) and 800-832-8224 (24-Hour Spill Reporting) numbers, including an explanation of each with information on how calls are handled after hours; • an active link to the online form to file a complaint; • a link to contact information for each region office; • a link to Citizen Collected Evidence information; • a link to Water Utilities consumer assistance; and • a link to the Nuisance Odor Protocol. The "Environmental Violations Hot Line" number should be renamed "Environmental Complaint Hot Line"; The brochure "Do You Want to Report An Environmental Problem?" and agency "hold" message should be revised to reflect the changes in terminology and Web site information; The regions night mailbox message was reviewed for consistent terminology and content and changes were made to address public comments and were forwarded to region offices for implementation; The 888# should be listed on the Chief Clerk's Office final action letter for permitting matters; and The 888# should remain a part of the agency hold message lineup.

	Basis: The Complaints Subcommittee noted a lack of consistent terminology for the Web site, brochure, and toll free numbers. Citizens, industry, and environmental groups expressed confusion about Web access and a toll free number to file a complaint. Subcommittee members agreed that the current Web site is not user friendly for filing a complaint. Changes would provide more consistent terminology to meet requirements in HB2912 and better promote the toll free numbers.
	Implementation Impacts: The following are the potential implementation impacts for improving the process of receiving complaints: • None of the recommendations concerning this issue would require additional LBB measures. • The changes to the night mailbox messages have already been made. • The direct link from the agency's homepage and the Field Operations homepage to the "Environmental Complaint" page should be completed by mid August 2004; • All of the remaining recommendations regarding the Web site should be completed by the end of October 2004; • One procedural change will be to add the '888' telephone number on the Chief Clerk's Office final action letter for permitting matters. • Implementation cost should be minimal. The main cost will be the reprinting of the brochures. Alternatives to minimize this cost are provided in the Other Alternatives Section.
Other Alternatives	Make no change to Web site or brochure. Use the old brochure until the supply is exhausted. Phase in new brochure with consistent terminology at a later date. The disadvantage of this alternative is that there was significant public comment that the public found the current process confusing or did not know how to file a complaint currently with the agency.
Notes	This issue is inter-related with key issue number 5 - Complaint Access.

Complaints Issue No. 3 - Attachment A

NIGHT MAILBOX MESSAGE

You have reached the Texas Commission on Environmental Quality, Austin Regional Office. Our office hours are Monday through Friday, from 8:00 a.m. 5:00 p.m.

If you are calling to file an environmental complaint identifying an imminent threat to human health or the environment, please call toll free 1-888-777-3186, otherwise please leave a detailed message including your name, phone number and the nature of the complaint at the tone. Agency staff will then attempt to contact you on the next business day.

If you are calling to report the release of hazardous or regulated material, please call toll free 1-800-832-8224. If you are calling to report an upset or maintenance event, please call toll free 1-800-832-8224 to report the event. Additionally, please fax that information to this office at 512/339-3795.

Thank you and have a nice day.

Complaints Issue No. 3 - Attachment B

NIGHT MAILBOX MESSAGE

You have reached the Texas Commission on Environmental Quality, Austin Regional Office. Our office hours are Monday through Friday, from 8:00 a.m. 5:00 p.m.

If you are calling to inquire about the smoke conditions in the area please be aware that the smoke is a result of agricultural burning in Mexico and Central America and is predicted to most heavily affect the South, Central and North Central areas of Texas over the next several days. Prevailing southerly winds are expected to continue to push the smoke from the Gulf of Mexico into Texas well into next week. You can take some precautionary measures by being aware of local smoke levels and stay indoors when smoke is present at higher levels and setting your air conditioning units to recirculate mode.

If you are able to access the internet the most recent environmental information is available on TCEQ's website www.tceq.state.tx.us under air quality. If you have health related questions please call your local public health department, the nearest TDH Regional Office or, TDH's Environmental Epidemiology and Toxicology Division in Austin, at 512-458-7269.

If you are calling with specific medical questions please contact your physician.

If you are calling to file an environmental complaint identifying an imminent threat to human health or the environment, please call toll free 1-888-777-3186, otherwise please leave a detailed message including your name, phone number and the nature of the complaint at the tone. Agency staff will then attempt to contact you on the next business day.

If you are calling to report the release of hazardous or regulated material, please call toll free 1-800-832-8224. If you are calling to report an upset or maintenance event, please call toll free 1-800-832-8224 to report the event. Additionally, please fax that information to this office at 512/339-3795.

Thank you and have a nice day.

Complaint Procedures Subcommittee	
Issue No.	**4**
Key Issue	**Citizen collected evidence (CCE):** What, if any, recommendations for change are needed to the citizen collected evidence rules and guidance?
	Basis: Public Comment
Other Subcommittees Reviewing Issue	Enforcement Process, EIC
Recommendation	1. No change is recommended to 30 TAC §70.4, Enforcement Action Using Information Provided by Private Individual.
	Basis**:** The Complaints Procedures Subcommittee reviewed the governing statute in the Water Code, §7.0025, Initiation of Enforcement Action Using Information Provided by Private Individual. The TCEQ rule closely follows the statute. In addition, the rule includes a requirement to treat CCE as a complaint subject to applicable complaint investigation procedures, if the ED determines not to initiate an enforcement action based on CCE [§70.4(e)].
	2. No changes are recommended to the current CCE protocols or procedures. The TCEQ should continue the current practice of requiring an individual to: (a) testify in enforcement proceedings, and (b) submit a sworn affidavit attesting to the facts that constitute the alleged violation, and demonstrating that relevant protocols were followed. In addition, the TCEQ should continue to process submitted information as a complaint if the individual doesn't submit the required affidavits or is not willing to testify.
	Basis: Comments received indicate that individuals may not wish to submit sworn affidavits or testify in enforcement actions. In addition, some individuals consider the CCE protocol standards too rigorous to reasonably achieve. Affidavits and testimony are required for two basic reasons: 1) the TCEQ can manage resources more effectively if an individual has committed to participating fully in the investigative and enforcement process, and 2) the use of CCE must be held to the same standards followed by the TCEQ for the investigation and enforcement processes and must be admissible in contested cases in order for cases based on CCE to proceed. The information collection protocol standards are minimum requirements and are the same as those followed by the TCEQ. The standards were developed to ensure the TCEQ has sufficient and credible information to support and justify an enforcement action, and to satisfy rules of evidence in contested cases. The standards for CCE must stay the same in order for the TCEQ to rely on CCE as the basis for enforcement actions.

	It is important to note that even if the CCE does not meet the requirements in 30 TAC §70.4(a) through (d), §70.4(e) ensures that individual CCE is always investigated as a complaint. This information still may lead to enforcement action, even if it does not meet the protocol standards. 3. The TCEQ should continue to provide: personal training and training of citizen/industry groups, as requested; and self-instructional training using materials available at regional offices. In addition, the TCEQ should increase CCE awareness by supplementing the current CCE Web site by adding a dedicated section related to training, which could include a copy of the training package used at the regional offices, and by publishing a report documenting the usefulness of CCE since the rule was adopted.
	Basis: Several comments received suggest that individuals are not aware of CCE or how the TCEQ has used CCE. The TCEQ has training materials that could be placed on the Web which would enhance the *Guidelines for Gathering and Preserving Information and Evidence Showing a Violation* Web site. In addition, as part of an agreement between the TCEQ and EPA the Field Operations Division assessed complaints received in conjunction with CCE, whether the evidence was collected according to the TCEQ protocols, and the number of enforcement actions initiated as a result of CCE. This information should be shared with the public.
	Implementation Impacts: Since the Complaint Procedures subcommittee recommended that no changes, there are no implementation impacts for these recommendations.
Other Alternatives	The TCEQ received comments for and against CCE. The Complaints Procedures Subcommittee believes that current statutes and rules are adequate to accept or reject CCE and allow the agency the flexibility to include information provided by individuals in the investigation and enforcement processes.
Notes	This issue interacts with subcommittee issues #1, (Complaint Guidance Document), #2 (Nuisance Odor Protocol Report), and #3 (Complaint Reporting), and might affect the Communication Subcommittee with the recommendation to add or enhance information on the TCEQ external Web site.

Complaint Procedures Subcommittee	
Issue No.	5
Key Issue	Complaint access: What capital resources would be needed to develop an online complaint database that will allow public access to complaint information?
	Basis: Public Comment
Other Subcommittees	Communications

Recommendation	TCEQ should take steps to provide online access to the incident (complaint) data that is in CCEDS. This may involve seeking approximately $50,000 in capital resources for the FY06-07 biennium from the 2005 Legislature. This "ball park" cost estimate is based on the TCEQ's experience with developing the public web pages (report/query) for the Central Registry. In FY05, TCEQ should conduct a "feasibility study" to determine the best way to provide incident data to the public via the Web. This study would assess what data to provide and how to depict the data so it meets user needs. The study results would guide development of the online incident data system. Based on public comment, the system would be expected to provide the following incident (complaint) data: • incident tracking number; • status (open, referred, closed); • priority (immediate, 1 day, 14, 30, 45, 60 days, refer, do not respond); • type (emission, fish kill, excess opacity, ww bypass, CERCLA, air shut down/start up, etc.); • location (region, county, etc); • regulated entity and customer; • start and end dates; • number of complainants; • frequency (current, intermittent, past, predictable); • duration; • effect (environmental, financial, general, health, property, chronic); • nature (color, dust, odor, septic, smoke, taste, etc.); • receiving water body; • actions taken (text); • investigator comments (text); and • description. This system should allow the user to query by: • incident tracking number; • priority (immediate, 1 day, 14, 30, 45, 60 days, refer, do not respond); • location (region, county, etc.); • regulated entity and customer; • start and end dates; and • receiving water body.
	Basis: The Complaints Subcommittee reviewed the public comment and the data available in CCEDs to develop this recommendation. Most of the data requested in comments is currently captured in CCEDS and made available to members of the public via hard copy on a request basis. However, making the data available online would significantly improve accessability. After the initial investment in developing the system, the availability of the data online could actually reduce the time spent by FOD in responding to individual inquiries about complaint follow-up.

	Implementation Impacts: The following are the potential implementation impacts for development of an online complaint database that will allow public access to complaint information: • Need to request capital resources for the FY06-07 biennium from the 2005 legislature. • Once the system is operational, EPA Region VI should be made aware of its existence. • Once the reporting parameters are established during the agency "feasibility study," the implementation schedule can then be determined. • There are no statutes or agency policies that address the requirement for an online complaint tracking database. • There would be a new cost associated with maintaining the database.
Other Alternatives	The subcommittee discussed options for providing access to complaints (incident) data via means other than a search-able online system. Options include: • having more staff available to answer phone calls and provide data on a case-by-case basis; and • establishing Web sites or list serves for specific incidents which have a high level of public interest. The subcommittee determined that a searchable on-line system would better meet the needs expressed in the public comment because it is flexible and convenient for all potential users and allows access to the greatest amount of data.