

Stormwater Investigations



Jason Lindeman
Texas Commission on Environmental Quality

Jason Lindeman



TCEQ Region 2
Lubbock Office

5012 50th, Ste 100
Lubbock, TX 79414

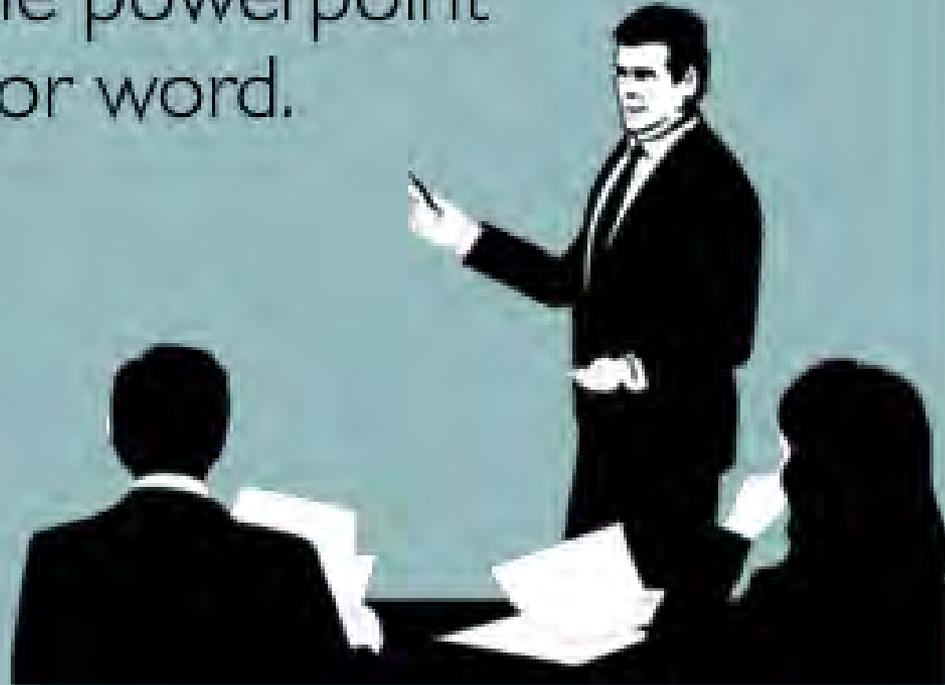
806-796-7092 (p)
806-796-7107 (f)

Jason.Lindeman@
tceq.texas.gov

Disclaimer



For my presentation today, I'll be reading the powerpoint slides word for word.



your  cards
someecards.com

Quick Overview

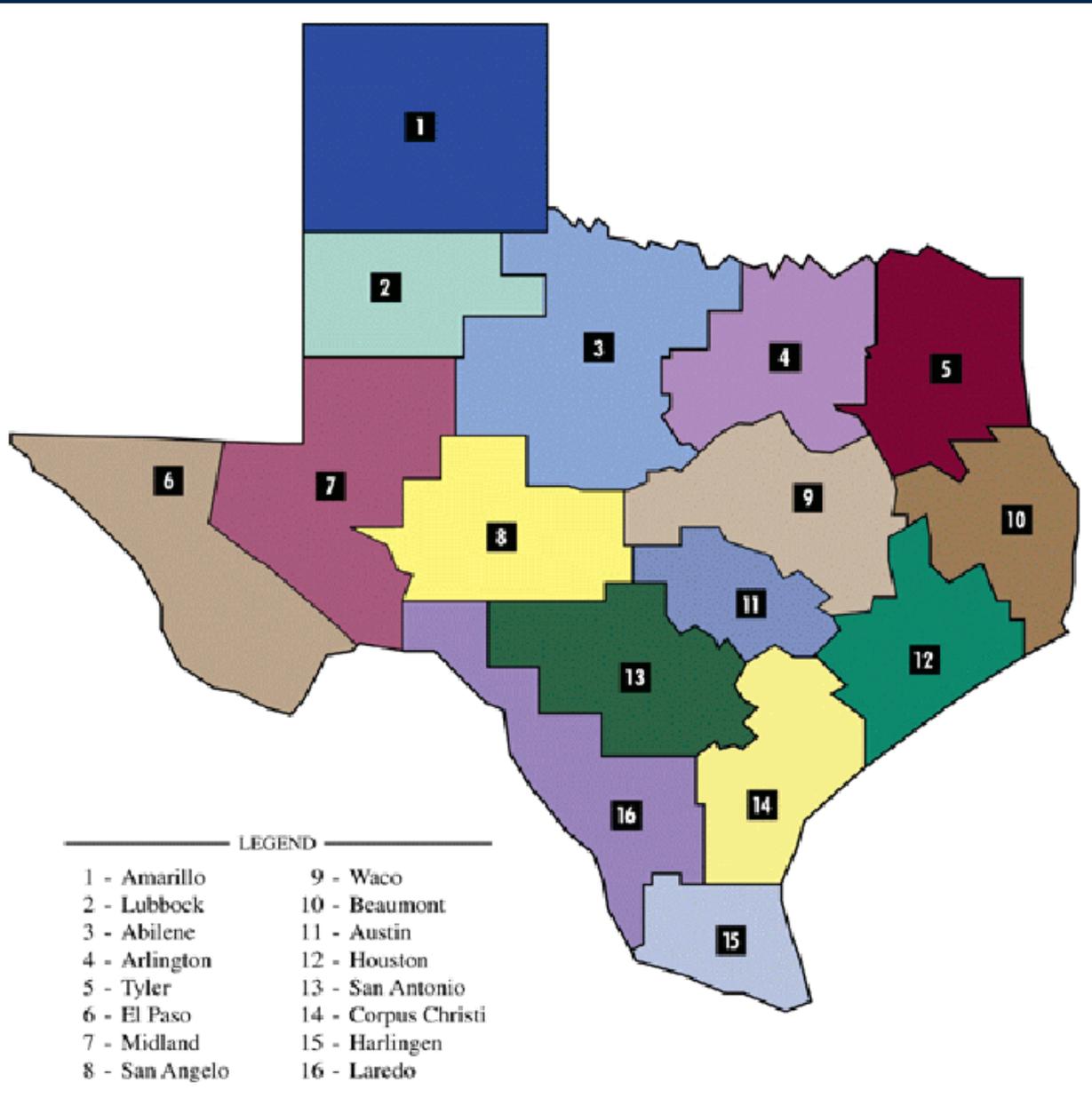


- ★ TCEQ Structure
- ★ Investigations
 - ◆ Multi-Sector General Permit
 - ◆ Construction General Permit
- ★ What happens after the investigation

TCEQ Structure



- ★ 3 Commissioners appointed by the governor
- ★ Executive Director
- ★ 6 other offices (Admin, Legal, Air, Waste, Water)
- ★ Office of Compliance and Enforcement
 - ◆ Border and Permian Basin
 - ◆ Central Texas
 - ◆ North Central and West Texas
 - ◆ Coastal and East Texas
- ★ ~2,500 employees!



Regional Areas



- ★ Conduct compliance investigations at permitted facilities
- ★ Investigate complaints at permitted and unpermitted facilities and operations
- ★ Develop enforcement actions for discovered violations
- ★ Provide environmental education and technical assistance to communities and the public as needed

Compliance Investigations



- ★ Primary purpose of compliance investigations is to evaluate compliance with established standards at a specific site
- ★ Conducted by Regional Staff
- ★ On-site investigations divided into three main categories
 - ◆ Reconnaissance
 - ◆ Focused
 - ◆ Comprehensive

Reconnaissance Investigations



- ★ Typically are shorter and focus on specific areas of compliance
- ★ Investigations may be announced or unannounced
- ★ May be initiated in the field or in response to a complaint
- ★ Can be a “drive-by” to determine if a permit is needed



Focused Investigations

- ★ 24 to 48 hour notice
- ★ Focus on specific aspect of compliance
 - ◆ PWS Pressure and Residual
 - ◆ CAFO Land Management Units
 - ◆ WQ Laboratory
 - ◆ STW No Exposure Certification
- ★ Encourage use of monitoring equipment

Comprehensive Investigations



- ★ Typically are more thorough and evaluate overall compliance with established standards
- ★ Advanced notice of the investigation is provided to the regulated entity
- ★ Notices range from 48 hours – two weeks
- ★ Entities with compliance history ratings of Unsatisfactory may not receive any advanced notice



Complaints

- ★ Complaints are types of incidents that allege environmental, health, or regulatory concerns
- ★ Complaints are prioritized according to their potential impact on human health and the environment
- ★ Complaints may be referred to delegated jurisdictions if adequate enforcement authority is in place

Stormwater Program



- ★ There are approximately 20 Environmental Investigators across the state conducting stormwater investigations
- ★ Permitted MS4s also have “Investigators”!
- ★ Investigators should be familiar with stormwater regulations and compliance issues
 - ◆ Multi-Sector General Permit, TXR050000
 - ◆ Construction General Permit, TXR150000
 - ◆ Phase I MS4
 - ◆ Phase II MS4

Strategy



- ★ Criteria for choosing a facility for an investigation
 - ◆ Potential impact to the environment, previous complaints, compliance history, proximity to water body, environmentally sensitive areas, target entities, length of time from last investigation, location in the region and permit compliance
- ★ Before calling the facility
 - ◆ Determine compliance history
 - ◆ If unpermitted site, determine if the customer has had a permit at other sites in Texas

Strategy



“If you wait to get your place in order until you get notified that TCEQ is coming out for an investigation, you’ve got bigger problems than the upcoming investigation.”

Strategy



- ★ I'm from the government, and I'm here to help!
- ★ Develop a good professional working relationship with the investigator
- ★ Think about other aspects of compliance
 - ◆ Complaints
 - ◆ Legal liabilities
 - ◆ Loss of business
 - ◆ Business expenses



Common Problems

- ★ Paperwork
- ★ Maintenance
- ★ Housekeeping
- ★ Unaware of rules and how they apply
 - ◆ Not implementing the plan
 - ◆ Not conducting inspections
- ★ Unaware of employee/contractor activities

MSGP Stormwater Pollution Prevention Plan (SWP3)



- ★ Do they have one developed?
- ★ Covered with dust or well maintained?
- ★ Is the SWP3
 - ◆ complete
 - ◆ in compliance with permit requirements
 - ◆ site specific

The Pollution Prevention Team



- ★ Identified members or positions and complete listing of responsibilities assigned to the members



Strategy



- ★ Don't assume anything
- ★ Follow through on your commitment to environmental excellence
- ★ Don't rely on your ideas of common sense

“Common sense is the collection of prejudices acquired by age eighteen.”
– Albert Einstein

Description of Potential Pollutants & Sources



- ★ Inventory of materials and specific pollutants exposed to stormwater
- ★ A narrative description of activities and potential pollutants (loading, storage, processing, maintenance, etc.)
- ★ List of reportable quantity and additional spills and leaks exposed to precipitation

Site Map



- ★ Flow of stormwater across facility to the facility boundary (outfalls)
- ★ Structures
- ★ Physical features and structural controls
- ★ Wastewater and air treatment units
- ★ Scrap-yards and surface water bodies
- ★ Maintenance areas
- ★ Reportable quantity spills
- ★ Processing, storage and loading areas



Best Management Practices (BMPs)

- ★ Developed in the SWP3
- ★ Address activities and exposed materials described in the inventory of exposed materials
- ★ Implemented on site

Pollution Prevention Measures and Controls



- ★ Good Housekeeping
 - ◆ is it developed in the SWP3?
 - ◆ is it implemented on site?









September 16, 2014

TCEQ Water Quality/Stormwater
Seminar







Erosion Control Measures

- ★ Section developed in the SWP3?
- ★ Are erosion controls implemented on site?
- ★ Controls include:
 - ◆ vegetative cover
 - ◆ contouring slopes
 - ◆ paving and structural controls (berms, etc.)







Maintenance Program for Structural Controls



- ★ Section developed in the SWP3
- ★ Includes oil/water separators, catch basins, sediment ponds, grass swales, berms, etc.
- ★ Routine inspection and maintenance
- ★ Documentation of estimated volumes of solids removed



Spill Prevention and Response



- ★ Identify potential spill areas
- ★ Develop and implement procedures for preventing storm water contamination from spills
- ★ Labeling of containers and special handling of hazardous materials
- ★ Spill clean up material and equipment









Employee Training and Education



- ★ Annual training described in the SWP3
- ★ Required for employees responsible for implementing or maintaining activities identified in the SWP3
- ★ Documentation of information required by the permit and training records
 - ◆ Material management, spill prevention, spill clean up, spill reporting, good housekeeping, BMPs, SWP3 goals
 - ◆ Attendance sheet with training date
- ★ Employee education
 - ◆ Employees not directly responsible for implementing activities identified in the SWP3
 - ◆ SWP3 goals and reporting stormwater issues

Non-Stormwater Discharge Survey and Certification



- ★ Description of non-stormwater discharges eligible for coverage
 - ◆ Potable water sources, air conditioner and compressor condensate, etc.
- ★ Certification that the evaluation was completed according to permit requirements
 - ◆ Were unauthorized discharges discovered?
 - ◆ Were they eliminated?
 - ◆ How and when was the evaluation conducted?
 - ◆ Was the signing according to Part III.E.6.(c)?









September 16, 2014

TCEQ Water Quality/Stormwater
Seminar



September 16, 2014

TCEQ Water Quality/Stormwater
Seminar



September 16, 2014

TCEQ Water Quality/Stormwater
Seminar



September 16, 2014

TCEQ Water Quality/Stormwater
Seminar



September 16, 2014

TCEQ Water Quality/Stormwater
Seminar



Periodic Inspections



- ★ Quarterly inspections to determine the effectiveness of:
 - ◆ Good housekeeping, spill prevention and response, erosion control, structural control maintenance, BMPs and employee training
- ★ Documented using a checklist
 - ◆ Meets permit requirements for documenting measures and controls to be evaluated
 - ◆ Summary description and time frames for needed revisions to the SWP3



Quarterly Visual Monitoring

- ★ Quarterly visual examination of stormwater discharges
 - ◆ Documenting observations of color, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, other indicators of pollution, and noticeable odors
- ★ Record of evaluation needs to include:
 - ◆ Location, date and times, personnel involved, discharge type, results, sources, visual quality, explanation if necessary

Quarterly Visual Monitoring (Con't)



- ★ Review of the results by the Pollution Prevention Team to identify pollution source and address conclusions
- ★ Representative storm events
- ★ Representative discharge samples
- ★ Substantially similar outfalls

Annual Comprehensive Site Compliance Evaluation



- ★ An annual evaluation of SWP3 effectiveness that includes the following:
 - ◆ Exposed activities and materials, structural controls, non-structural controls (good housekeeping, spill prevention, etc.), areas immediately downstream of stormwater outfalls, industrial materials with stormwater contact, offsite tracking, record review
- ★ Documented as a report that includes:
 - ◆ Personnel involved, evaluation date, incidents of non-compliance (SWP3 not implemented or permit requirement not met)
 - ◆ Certification that the facility is in compliance with SWP3 and permit if no incidents of non-compliance are discovered
- ★ Resolving non-compliances and revising the SWP3

Hazardous Metal Monitoring



- ★ Annual sampling for analyses of metals (As, Ba, Cd, Cr, Cu, Pb, Mn, Hg, Ni, Se, Ag, Zn) to inland and tidal waters
- ★ Daily maximum effluent limitation for grab samples of storm water from final outfalls or immediately before entering surface water in the state
- ★ Recorded on a discharge monitoring report (DMR) which is to be retained on site or submitted to TCEQ Information Resources Center when there is a numeric limitation violation

Hazardous Metals Waiver



- ★ Form certifying that metals (As, Ba, Cd, Cr, Cu, Pb, Mn, Hg, Ni, Se, Ag, Zn):
 - ◆ Are not contained in raw material, intermediate or final product; or
 - ◆ Are not exposed to stormwater, unless a final product designed for outdoor use; or
 - ◆ Were not at detectable levels for a sample analysis when testing methods meet the minimum analytical levels (MAL) sensitivity.
- ★ Available on outfall-by outfall/metal by metal basis
- ★ Waiver must be onsite or made available to TCEQ staff

Benchmark Monitoring



- ★ Analytical sampling required for some sectors or SIC codes
- ★ Analytical results are compared to the benchmark values to determine SWP3 effectiveness.
 - ◆ Benchmark values are NOT numeric effluent limitations (exceedances are not permit violations)
 - ◆ Within 90 days following the sampling event, each exceedance is to be investigated by the Pollution Prevention Team to address the cause, which includes additional BMPs and SWP3 revisions.
- ★ Semi-annual sampling throughout the permit term
 - ◆ Average yearly results for specific pollutants discharged under a SIC code is to be reported to TCEQ

Waste Issues



- ★ Waste storage or disposal at industrial facilities can contribute pollutants to stormwater discharges and can represent violations of the Texas Water Code (TWC 26.121), industrial waste rules (30 TAC 335.4) or municipal waste rules (30 TAC 330.15).
- ★ Wastes must be managed and/or receive proper disposal such that surface and ground water (water in the state) is not threatened by contaminated discharges.





Construction General Permit SWP3



- ★ Site / Project description
- ★ Schedule
- ★ Number of acres
- ★ Site map
- ★ BMPs
- ★ Erosion and sediment controls
- ★ Copy of General Permit TXR150000

Best Management Practices



- ★ Structural controls
- ★ Sedimentation basins (10 + Acres Drainage)
- ★ Protection of down slope boundaries
- ★ Silt fences
- ★ Earth dikes or berms
- ★ Drainage swales
- ★ Inlet protection

Stabilization and Pollution Control Examples



- ★ Temporary/Permanent seeding
- ★ Mulching
- ★ Vegetative buffer strips
- ★ Preservation of trees
- ★ Contouring and protecting areas

Common Problems at Construction Sites



- ★ Not authorized
- ★ Improperly installed BMPs
- ★ SWP3 not implemented
- ★ Poor housekeeping
- ★ SWP3 not updated/incomplete
- ★ Sign not visible
- ★ Not conducting any inspections

















September 16, 2014

TCEQ Water Quality/Stormwater
Seminar



























What Happens After the Investigation?



- ★ General compliance
- ★ Additional issues
- ★ If violations are documented, facility is issued an NOV or an NOE depending on the severity of the violations
- ★ Timeframe is set for a response
- ★ Investigator is the point of contact for response to NOV

What Happens After the Investigation?



- ★ Opportunity for facility to appeal violations only if respondent has new information
- ★ If there is no response or inadequate response to the NOV, the respondent may be referred to Enforcement

Formal Enforcement



- ★ See RG-344 “The TCEQ Has Just Inspected My Business” for details on the enforcement process
- ★ Penalties are typically associated with NOEs
- ★ Statutory maximum is \$10,000 per day per violation
- ★ Specific penalties are determined by the enforcement division
- ★ See RG-253 “Penalty Policy” for details



Field Citations

- ★ Streamlined enforcement process for clear-cut violations
 - ◆ Failure to obtain a MSGP
 - ◆ Failure to obtain a CGP
- ★ Customer must have knowledge of requirements through previous permit or violation
- ★ \$875 fine
- ★ Deferral for “expedited process”



Summary

- ★ Know the rules and apply them
- ★ Be committed to getting into compliance
- ★ Dedicate the time, effort, and resources necessary to stay in compliance
- ★ Perform the day to day activities you have to do to stay in compliance

Stay cool...



Don't blow away...



Beware of dogs...



And watch your step!



Questions?



TCEQ Region 2
Lubbock Office

5012 50th, Ste 100
Lubbock, TX 79414

806-796-7092 (p)
806-796-7107 (f)

Jason.Lindeman@
tceq.texas.gov