



KELLY AFB
TEXAS

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 3250

Kelly Special Restoration Advisory Board (RAB)
Meeting Agenda
Tuesday, September 14, 2004 6:30 p.m.
Environmental Health and Wellness Center (EHWC)
911 Castroville Road

Meeting Goals

The RAB will:

- Review the Compliance Plan

- | | | |
|------|--|-----------------|
| I. | <u>Roll call begins at 6:30 p.m.</u> <ul style="list-style-type: none">- Meeting will convene- Pledge of Allegiance- Moment of silence- Welcome and introductions- Discuss goals for this meeting | Dr. David Smith |
| II. | Compliance Plan Briefing | Mr. Mark Stough |
| III. | Community Comment/Question-and-Answer session on the Compliance Plan | Dr. David Smith |
| IV. | Meeting Wrap-Up <ul style="list-style-type: none">- Action items will be addressed at the next regular RAB meeting- Meeting minutes will be approved at the next regular RAB meeting- Next RAB meeting proposed for Tuesday, October 19, 2004, at 6:30 p.m., at the Kennedy High School Auditorium *- Next TRS meeting proposed for Tuesday, November 9, 2004, at 6:30 p.m., at the Environmental Health and Wellness Center* | Dr. David Smith |

**Meeting dates and locations are subject to change.*

Kelly Special Restoration Advisory Board (RAB)
 Technical Review Subcommittee (TRS)
 SUMMARY



September 14, 2004
 Environmental Health & Wellness Center
 911 Castroville Rd.
 San Antonio, TX 78237

1. Attendees:

Ms. Leslie Brown	Ms. Norma Landez
Mr. Don Buelter	Ms. Julia Menchaca
Ms. Jolene Bowman	Mr. Gary Miller
Ms. Rose Campos	Mr. Sam Murrah
Mr. Germain Carvilla	Mr. Gary North
Mr. Adrian Cortes	Ms. Melissa P. Onmon
Ms. Gloria Cortes	Mr. Nazirete Perez
Ms. Kyle Cunningham	Ms. Abbi Power
Ms. Larisa Dawkins	Mr. Armando Quintanilla
Ms. Leigh-Ann Fabianke	Mr. Gilbert Ramos
Mr. Rodrigo Garcia	Ms. Rose Ramos
Mr. Henry Galindo	Mr. Sam Sanchez
Mr. Ben Galvan	Mr. Michael Sheneman
Ms. Esmeralda Galvan	Ms. Belinda Silvas
Mr. Dan Gonzales	Mr. Robert Silvas
Ms. Coriene Hannapel	Mr. Kelley Siwecki
Ms. Blanca V. Hernandez	Dr. David Smith
Ms. LeAnn Herren	Mr. Mark Stough
Ms. Brittney Hoch	Ms. Robyn Thompson
Ms. Tanya Huerta	Ms. Rhonda Urbanovsky
Ms. Linda Kaufman	Mr. Mark Weeger
Ms. Cheri Kirkpatrick	Mr. James Wittmer

- 2. Introduction.** Dr. David Smith, RAB/TRS Facilitator, opened the meeting at 6:30 p.m. and called the roll. It was found that there were only nine community members present, so a quorum was not achieved to conduct business. Dr. David Smith announced that Mr. Adam Antwine has temporarily been reassigned to a position in Washington D.C. and Ms. Larisa Dawkins would be filling his seat as government co-chair for this Special RAB meeting. The Pledge of Allegiance was said and Ms. Larisa Dawkins dedicated the moment of silence to Mr. Dick Walters who had recently passed. Dr. David Smith announced that the goal of the meeting was to discuss the Compliance Plan. He explained the process of how questions would be written down before the briefing as well as after the briefing to ensure that everyone's questions are accurately recorded on the note pads in the front of the room.



3. **Compliance Plan Briefing.** Dr. Mark Stough of the Air Force Real Property Agency (AFRPA) presented a briefing on the Compliance Plan, including background information, components of the Plan, scientific terminology commonly used in the plan and report, Compliance monitoring data, types of substances sampled according to the Plan and an explanation of the public participation process involved with the Compliance Plan.
4. **Community Comment/Q-and-A Session on Compliance Plan.** Mr. Mark Stough responded to questions from the audience and RAB members in attendance concerning the Compliance Plan and related subjects.
5. **Meeting Wrap-Up.** Dr. David Smith stated that RAB member attendance issues and action items will be discussed at the next regularly scheduled RAB meeting. Meeting minutes will also be approved at the next regular RAB meeting.
6. **Next Meeting.** The next regularly scheduled RAB meeting is set for Tuesday, October 19, 2004, at 6:30 p.m. at Kennedy High School. The next regularly scheduled TRS meeting is set for Tuesday, November 9, 2004, at 6:30 p.m. at the Environmental Health and Wellness Center.
7. **Adjourn.**



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Compliance Plan Briefing Special RAB September 14, 2004





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Environmental Cleanup Program

- **Environmental Cleanup History**
 - Jet fuel was discovered in the shallow groundwater near Quintana Road in 1988
 - The first cleanup system (for the jet fuel spill) was installed in 1990
- **Discovery of the off-base Shallow Groundwater Plume**
 - Investigations found that a shallow groundwater plume extended four miles east of the base
 - The chemicals of concern are PCE, TCE, 1,2 DCE and vinyl chloride.





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History of the Compliance Plan

- On 12 June 1998, the Texas Commission on Environmental Quality (TCEQ) issued the Compliance Plan No. CP-50310 for the former Kelly Air Force Base (AFB)
- The first report: January 1999

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Compliance Plan

- The Compliance Plan explains how samples are to be collected, what testing methods are used and quality control steps that make sure any and all mistakes are caught and corrected.
- The Plan only deals with the contaminated ground water and the contamination source.
- Objective: Kelly is required to test the groundwater and prove the clean up systems are working to the standards stated in the Compliance Plan

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According to the Compliance Plan...

- **Kelly must prepare two *Semiannual Compliance Plan* reports each year (January and July). One report covers the data collected during July–December and the other report covers the data collected during January–June. Each report represents the activities of the previous six months.**

- **Copies of the reports must be submitted to the Texas Commission on Environmental Quality (TCEQ) and the Environmental Protection Agency (EPA)**

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What Must the Report Include?

- Water level information & maps
- Chemical study results & comparison to standards
- Data review
- Notation of non-aqueous phase liquids & maps
- Amount of ground water recovered
- Plume maps
- Table & map of monitoring and recovery wells
- Table of changes & amendments to the compliance plan
- Review of well inspections, problems & repairs
- Narrative summary of review

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Data Evaluation

- The Compliance Plan has two ways of making sure Kelly meets the cleanup standards:
 - Compare the lab results from monitoring wells to the Compliance Plan standards
 - Use statistics

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Monitoring Wells

The figure is a map showing the locations of monitoring wells. The wells are represented by green dots scattered across a map area that includes a central green-shaded region and surrounding urban areas with street grids. A date stamp in the bottom right corner of the map area reads "May 2004".

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Sampling

■ **Metals Sampled:**

Antimony	Copper
Arsenic	Lead
Barium	Mercury
Beryllium	Nickel
Cadmium	Selenium
Chromium	Silver
Cyanide	Thalium
Cobalt	Vanadium
Zinc	




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Sampling

■ **Volatile Organic Compounds (VOC) Sampled:**

Acetone	1,2-Dichloroethane	Styrene
Benzene	1,1-Dichloroethene	Tetrachloroethene
2-Butanone	1,2-Dichloroethene (total)	Toluene
Carbon disulfide	1,2-Dichloropropane	1,1,1-Trichloroethane
Carbon Tetrachloride	2,4-Dinitrotoluene	1,1,2-Trichloroethane
Chlorobenzene	Ethylbenzene	Trichloroethene
Chloroethane	2-Hexanone	Vinyl Acetate
Chloroform	4-Methyl-2-pentanone	Vinyl Chloride
1,1-Dichloroethane	Methylene Chloride	Xylene



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Sampling

■ **Semivolatile Organic Compounds (SVOC) Sampled:**

Acenaphthene	1,4-Dichlorobenzene	4-Methylphenol
Anthracene	3,3-Dichlorobenzidine	n-Nitroso-di-n-propylamine
Benzo(a)pyrene	2,4-Dichlorophenol	Naphthalene
Bis(2-ethylhexyl)phthalate	Diethyl phthalate	2-Nitrophenol
Butylbenzyl phthalate	2,4-Dimethylphenol	4-Nitrophenol
Chloroethane	DI-n-Octyl phthalate	Pentachlorophenol
2-Chlorophenol	Fluoranthene	Phenanthrene
Chrysene	Fluorene	Phenol
Dibenzofuran	Hexachloroethane	Pyrene
1,2-Dichlorobenzene	2-Methylnaphthalene	1,2,4-Trichlorobenzene
1,3-Dichlorobenzene	2-Methylphenol	

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Sampling

■ **Pesticides/ herbicides/ Polychlorinated Biphenyls (PCB) Sampled:**

4,4'-DDD	Beta-BHC
4,4'-DDE	Gamma-BHC (Lindane)
4,4'-DDT	Alpha-Chlordane
Arochlor - 1232	Gamma-Chlordane
Arochlor - 1248	Dieldrin
Arochlor - 1254	Heptachlor
Arochlor - 1260	Heptachlor epoxide
Alpha-BHC	Toxaphene

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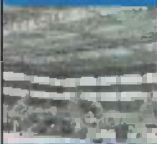
2003 Sampling Results

- **Decreases in the amount and extent of chlorinated solvents in the source areas and downgradient of the cleanup systems have occurred in the following areas:**
 - Zone 4 off-base
 - Around recovery systems in Zone 2 near Leon Creek
 - WP022 (E-3) Source area - remaining steady
 - Downgradient of Site SS040 (MP)

- **Findings of the report show no elevated risks to the ecological receptors in Leon Creek from the chemicals**

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Questions?

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AFRPA/DC-Kelly September 14, 2004 Compliance Plan Briefing to RAB



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Compliance Plan CP-50310

- Issued to Former Kelly AFB by the Texas Commission on Environmental Quality, June 12, 1998
- 51 page document (excluding maps)
- **Objective:** "The Permittee is required to conduct the Corrective Action and Ground-Water Monitoring Programs in accordance with limitations, requirements, and other conditions set forth herein."

(Kelly has to test the groundwater to prove the clean up systems are working to the standards stated in the Compliance Plan)

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Compliance Plan Sections

- Sec 1: Size and Location of Facility
- Sec 2: Corrective Action Systems
- Sec 3: Gen Design, Construction and Oper Requirements
- Sec 4: Corrective Action Objectives & the GW Protection Stds
- Sec 5: Corrective Action Program
- Sec 6: Ground-Water Monitoring Program
- Sec 7: Response and Reporting
- Sec 8: Corrective Action for Solid Waste Management Units
- Sec 9: Compliance Schedule
- Sec 10: General Provisions
- Sec 11: Force Majeure

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Ground-Water Monitoring Program

- Waste Management Area Specific Background Ground Water Quality
- Sampling and Analysis Plan
- Sampling/Analysis Schedule and Rules
- Data Review Steps

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Waste Management Area Specific Background Ground Water Quality

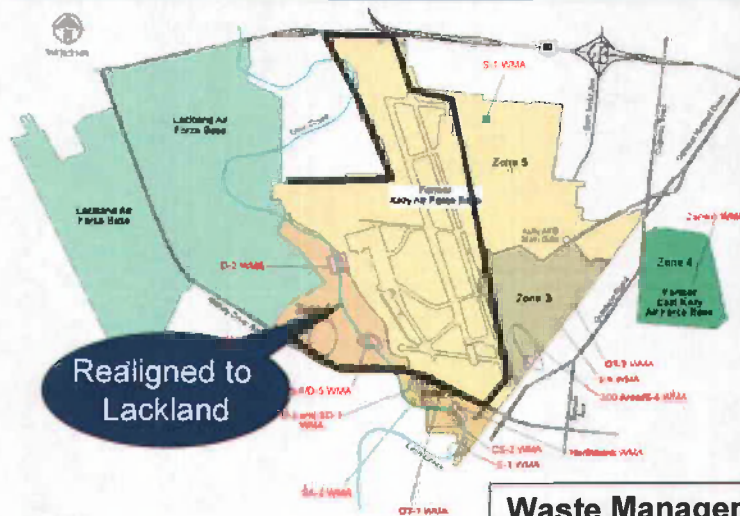
- **Groundwater Monitoring**
 - 14 Waste Management Areas (WMA)
 - WMAs are groups of sites called Solid Waste Management Units (SWMU)
 - These sites are also referred to as Installation Restoration Program (IRP) Sites by the Air Force
 - 4 RCRA-permitted units
- **Surface water, sediment and biological monitoring of Leon Creek**

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Waste Management Area Specific Background Ground Water Quality



Waste Management Areas

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Sampling and Analysis Plan

- The Compliance Plan explains how samples are to be collected, what testing methods are used, and quality control steps that make sure any and all mistakes are caught and corrected.

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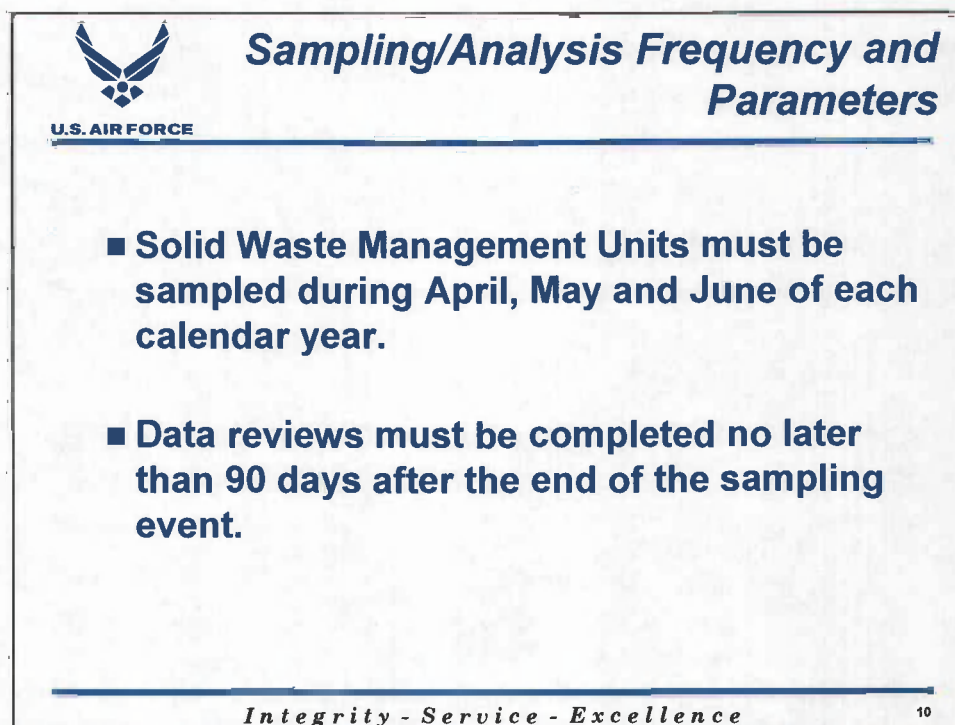
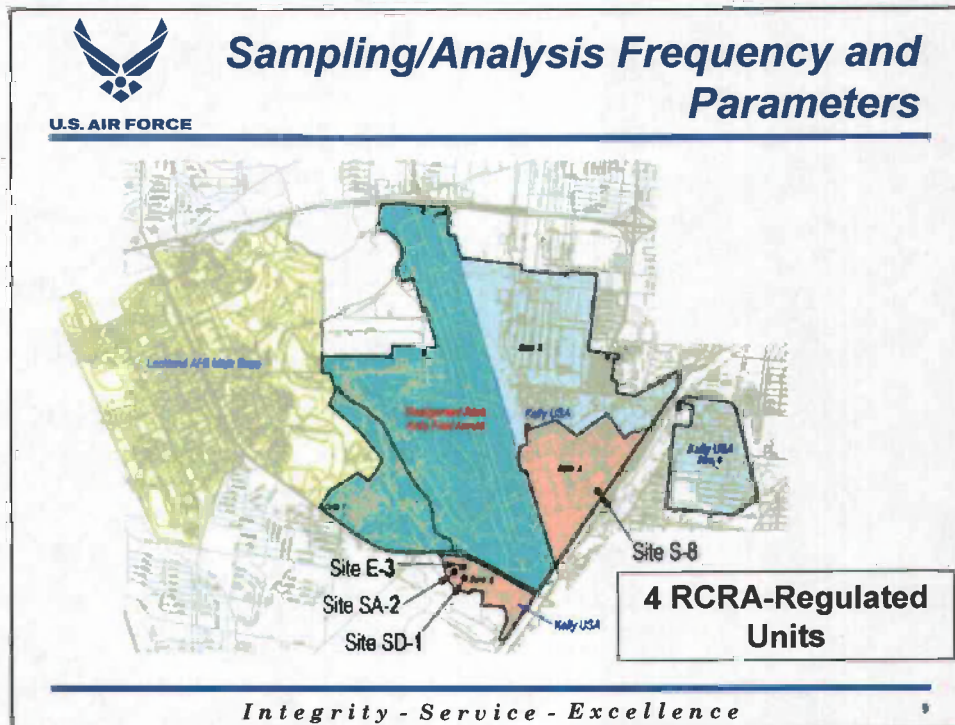
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Sampling/Analysis Frequency and Parameters

- Resource Conservation and Recovery Act (RCRA)-regulated units must be sampled between January 1 – 31 and July 1 – 31 of each calendar year.
- Data reviews must be completed no later than 60 days after the end of the sampling event.

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Sampling/Analysis Frequency and Parameters

- **Leon Creek must be sampled semiannually for surface water and sediment.**

- **Bioassessment monitoring of Leon Creek is required to be performed annually.**

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Sampling/Analysis Frequency and Parameters

- **Main Chemicals of Concern in the Shallow Ground Water:**
 - **Tetrachloroethylene (PCE) – a common chemical, used in dry cleaning and degreasing metal parts**
 - Used at Kelly as a solvent and degreaser of airplane motors
 - Entered the shallow groundwater from previously approved disposal practices, leaks, and spills

 - **Trichloroethylene (TCE) – a common chemical, used in adhesives, paint removers, spot removers, typewriter correction fluids, and to degrease metal parts**
 - Primary chlorinated solvent used at Kelly to clean and degrease aircraft component parts
 - Entered the shallow groundwater as a result of previously approved disposal practices, leaks, and spills

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Sampling/Analysis Frequency and Parameters

■ All wells must be analyzed for these metals:

Antimony	Copper
Arsenic	Lead
Barium	Mercury
Beryllium	Nickel
Cadmium	Selenium
Chromium	Silver
Cyanide	Thallium
Cobalt	Vanadium
Zinc	

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Sampling/Analysis Frequency and Parameters

■ All wells must be analyzed for these Volatile Organic Compounds (VOC):

Acetone	1,2-Dichloroethane	Styrene
Benzene	1,1-Dichloroethene	Tetrachloroethene
2-Butanone	1,2-Dichloroethene (total)	Toluene
Carbon disulfide	1,2-Dichloropropane	1,1,1-Trichloroethane
Carbon Tetrachloride	2,4-Dinitrotoluene	1,1,2-Trichloroethane
Chlorobenzene	Ethylbenzene	Trichloroethene
Chloroethane	2-Hexanone	Vinyl Acetate
Chloroform	4-Methyl-2-pentanone	Vinyl Chloride
1,1-Dichloroethane	Methylene Chloride	Xylene

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Sampling/Analysis Frequency and Parameters

- All wells must be analyzed for these Semivolatile Organic Compounds (SVOC):

Acenaphthene	1,4-Dichlorobenzene	4-Methylphenol
Anthracene	3,3-Dichlorobenzidine	n-Nitroso-di-n-propylamine
Benzo(a)pyrene	2,4-Dichlorophenol	Naphthalene
Bis(2-ethylhexyl)phthalate	Diethyl phthalate	2-Nitrophenol
Butylbenzyl phthalate	2,4-Dimethylphenol	4-Nitrophenol
Chloroethane	Di-n-Octyl phthalate	Pentachlorophenol
2-Chlorophenol	Fluoranthene	Phenanthrene
Chrysene	Fluorene	Phenol
Dibenzofuran	Hexachloroethane	Pyrene
1,2-Dichlorobenzene	2-Methylnaphthalene	1,2,4-Trichlorobenzene
1,3-Dichlorobenzene	2-Methylphenol	

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Sampling/Analysis Frequency and Parameters

- All wells in Zones 1 and 2 must be analyzed for these pesticides/herbicides/Polychlorinated Biphenyls (PCB):

4,4'-DDD	Beta-BHC
4,4'-DDE	Gamma-BHC (Lindane)
4,4'-DDT	Alpha-Chlordane
Arochlor - 1232	Gamma-Chlordane
Arochlor - 1248	Dieldrin
Arochlor - 1254	Heptachlor
Arochlor - 1260	Heptachlor epoxide
Alpha-BHC	Toxaphene

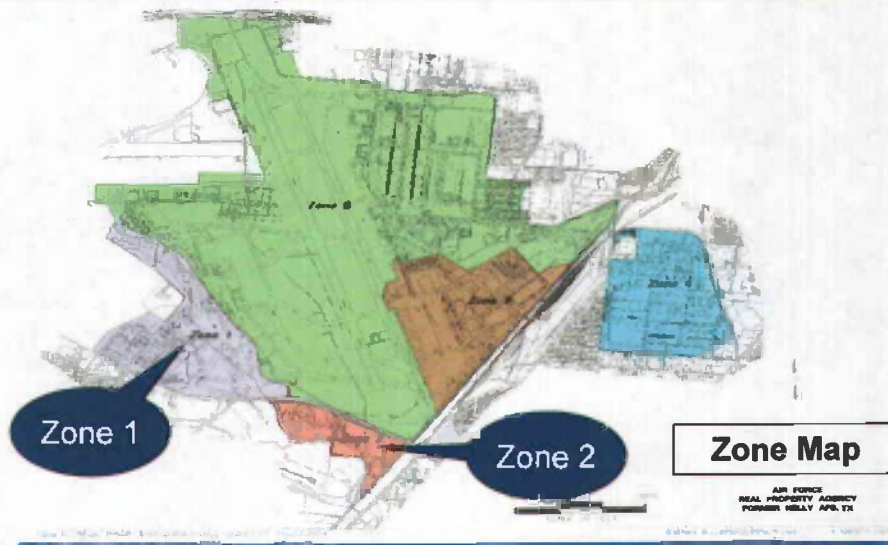
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Sampling/Analysis Frequency and Parameters



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Sampling/Analysis Frequency and Parameters

■ General chemistry analytes for Leon Creek:

Alkalinity	Methylene Blue Active Sub	pH
Biochemical Oxygen Demand	Nitrogen (Ammonia)	Phosphorous
Chemical Oxygen Demand	Nitrogen (Nitrate)	Specific Cond
Chloride	Nitrogen, (Nitrite)	Sulfate
Chlorine	Oil & Grease	Temperature
Dissolved Oxygen	Orthophosphate	Total Diss Solids
Fecal Coliform	Oxid-Red Potential	Total Organic Carbon
Hardness	Particle Size	TPH
	Turbidity	

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Data Evaluation Procedures

- The compliance plan has two ways of making sure Kelly follows the rules:
 - Compare the lab results from monitoring wells to the compliance plan standards
 - Use statistics (Confidence Interval Procedure)

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Response and Reporting

- Kelly must prepare two reports each year (January and July). One report covers the data collected in January and the other report covers the data collected in July and each report represents six months of ground water sampling data.
- Copies of the reports must be submitted to the TCEQ and EPA.

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Response and Reporting

What must the report include?

- **Water level data & maps**
- **Chemical analysis results & comparison to standards**
- **Data review**
- **Notation of non-aqueous phase liquids & maps**
- **Amount of ground water recovered**
- **Plume maps**
- **Table & map of monitoring and recovery wells**
- **Table of modifications & amendments to the compliance plan**
- **Summary of well inspections, problems & repairs**
- **Narrative summary of evaluations**

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FINAL PAGE

ADMINISTRATIVE RECORD

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