



Town of DISH, Texas Air Emissions Test

Emergency Response
December 13, 2009

Wolf Eagle Environmental





Town of DISH Air Emissions Test - Emergency Response

1.0 Introduction

Wolf Eagle Environmental ("Wolf Eagle") received a request from Mayor Calvin Tillman on Sunday, December 13, 2009 for an emergency air emissions monitoring in the Town of DISH. Mayor Tillman reported to Wolf Eagle that he noticed a particularly noxious odor all day believed to be emanating from the compression stations. Given the results of the previous air emissions test, Mayor Tillman notified the Texas Commission on Environmental Quality ("TCEQ") in a timely manner requesting assistance. After receiving no response from TCEQ, he then contacted Wolf Eagle and requested an emergency air emissions test. The call was retrieved by Wolf Eagle at approximately 6:30 pm, two (2) hours after the call was placed. Wolf Eagle mobilized on the same day at 6:40 pm and arrived on site at 7:15 pm.

2.0 Background

The Town of DISH, Texas, has a history of fugitive air emissions following the erection of five (5) compression stations. Previous emissions studies (www.townofdish.com, Wolf Eagle Ambient Air Monitoring Analysis, 2009) confirmed the presence of numerous volatile organic compounds (VOCs) and compounds of sulfides with exceedences of TCEQ Effects Screening Levels (ESLs) in numerous chemicals (benzene, xylene, carbon disulfide, naphthalene, dimethyl disulphide, methyl ethyl disulphide, etc). In addition to VOCs listed above, concentrations of methane were subsequently identified in levels that exceed normal ambient air concentrations.

3.0 Weather Conditions

Weather conditions on Sunday, December, 13, 2009, were confirmed at Denton Municipal Airport (03991) Denton, Texas. Sky conditions were clear with temperature ranges from a low of 46 degrees Fahrenheit to a high of 66 degrees Fahrenheit. Winds were reported out of the south/southeast at an average wind speed of 9 miles per hour with occasional wind gusts up to 16 miles per hour.

4.0 Ambient Air Sampling

Wolf Eagle responded to a request for an emergency fugitive air emissions testing in DISH, Texas, on Sunday, December 13, 2009. Upon arrival at the site, the Wolf Eagle technician reported a strong, acrid odor present. No service vehicles were noted present at any compressor site and no activity of maintenance or service was noted. No additional lights were present at any of the facilities other than usual security lights.

Wolf Eagle performed whole air emissions testing for VOCs, Tentatively Identified Compounds (TICs) and Light Hydrocarbons. A single location was tested. Sampling procedures followed ASTM Method D31357 using a certified sterilized evacuated pressurized stainless steel Summa canister with a 24-hour flow regulator (certified mass flow 24-hour meter) obtained from a certified air testing laboratory (GD Air Testing, Inc., 551 N. Plano Parkway, Richardson, Texas). The canister was certified with both a canister number and canister batch number from the laboratory verifying proper evacuation and pressurization. The canister location was verified by GPS coordinates. The initial time of can depressurization (opening) was noted and recorded on the chain of custody. Upon completion of sampling, the hand valve was closed, brass cap secured and time of closure noted. The canister was collected on December 14, 2009, inspected for damage or dents that could impact quality of samples. No dents or damage to either canister or flow valve was noted. The canister was returned to the certified testing laboratory in a timely fashion to insure quality of sample with proper chain of custody.

A TO-14¹ (Toxic Organic Compounds) VOC analysis of multiple volatile organic compounds and a TIC, along with Light Hydrocarbons were requested and a subsequent report characterizing compounds was produced by the independent laboratory.

5.0 Location of the Monitor

The monitor was located at the Clark Airport at a previously monitored location of Airfield 1:29, which is generally located at the south east corner of the Clark Airfield airstrip in DISH, Texas. A visual examination confirmed all compressors appeared to be on line and operational with consistent industrial sounds emanating from the compressors.

¹ The TO-14 is the original and most common method used to test ambient air for toxic organic compounds and is the recommended procedure according to the U.S. Environmental Protection Agency (EPA). The TO-14 covers the widest range of volatile organic compounds reporting 40 different species.