

AIR CP_106597875_CP_20171016_Investigation_1415945_
Texas Commission on Environmental Quality
Investigation Report

The TCEQ is committed to accessibility. If you need assistance in accessing this document, please contact oce@tceq.texas.gov

Customer: voestalpine Texas LLC
Customer Number: CN604261545

Regulated Entity Name: LA QUINTA PLANT

Regulated Entity Number: RN106597875

Investigation # 1415945

Incident Numbers

258138	258144
258230	258165
258226	258283
258166	258034
258238	258202
258245	258285
258031	258243
258039	258158
258142	258248
257967	258027
258146	258169
258160	258156
258170	258263
258171	258147
258172	258140
258023	258232
258229	258143
258149	258173
258162	258174
258201	258176
258244	258177
258250	258251
258242	258012
258235	258150
258141	258264

Investigator: SUSAN HOELSCHER

Site Classification PERMIT BY RULE
PREVENTION OF
SIGNIFICANT
DETERIORATION
GREENHOUSE GAS PSD
CASE-BY-CASE

Conducted: 05/16/2017 -- 10/16/2017

NAIC Code: 331110

NAIC Code: 331111

SIC Code: 3312

Program(s): AIR NEW SOURCE PERMITS

Investigation Type: Compliance Investigation

Location: FROM CORPUS CHRISTI TAKE US-181N
ONTO FM RD 136 AND GO APPROX 1.0 MI GO R
ONTO LA QUINTA RD/PVT RD 87A AND THE SITE
IS APPROX 2.0 MI DOWN ON R. IT IS BOUNDED ON
THE E BY LA QUINTA RD AND THE S BY CORPUS
CHRISTI BAY

Additional ID(s): GHGPSDTX43
PSDTX1344M1
108113

LA QUINTA PLANT - CORPUS CHRISTI ETJ

5/16/2017 to 10/16/2017 Inv. # - 1415945

Page 2 of 29

147082

Address: ,

, ,

Local Unit: REGION 14 - CORPUS CHRISTI

Activity Type(s): AIRCOMPL - AIR CMPL - AIR COMPLAINT INV

Principal(s):

Role

Name

RESPONDENT

Referred from Principal

VOESTALPINE TEXAS LLC

CITY OF PORTLAND

Contact(s):

Role

Title

Name

Phone

REGULATED
ENTITY
CONTACT

PROCESS WATER
COORDINATOR/ENVI
RONMENTAL
SPECIALIST

MR DOMINICK
HERNANDEZ

Work (361) 704-9000

REGULATED
ENTITY
CONTACT

ENVIRONMENTAL
MANAGER

MS Shannon Parham

Cell (361) 229-2865
Fax (361) 704-9090
Work (361) 704-9000

REGULATED
ENTITY
CONTACT

CHIEF TECHNICAL
OFFICER

HELMUT SCHWARZ

Cell (361) 229-0760
Fax (361) 704-9090
Work (361) 704-9000

PARTICIPATED
IN

ATTORNEY AT LAW,
OUTSIDE COUNSEL

MIKE CHERNEKOFF

Cell (832) 260-5740
Fax (504) 589-8264
Phone (713) 437-1827

PARTICIPATED
IN

ATTORNEY AT LAW,
OUTSIDE COUNSEL

MS LARA PRINGLE

Work (713) 437-1831
Fax (713) 437-1924

REGULATED
ENTITY
CONTACT

HEAD OF SAFETY,
SECURITY &
EMERGENCY

TIM
VANLANDINGHAM

Work (361) 704-9000
Cell (361) 800-1669
Fax (361) 704-9090

PARTICIPATED
IN

STAFF ATTORNEY

MR JESS ROBINSON

Phone (512) 239-0455

Other Staff Member(s):

Role	Name
Investigator	ASHLEY FUQUA
Investigator	MICHAEL RIFF
Investigator	THOMAS HANEY
QA Reviewer	CYNTHIA SMITH
Supervisor	KELLY RUBLE
Investigator	JESSICA FOX
Investigator	CHRISTOPHER REZENDES
Investigator	TRAVIS PRATER
Investigator	MEAGAN COOPER
Investigator	COREY BURKE
Investigator	RICHARD HEITZENRATER
Investigator	RENAE DIGUARDI
Investigator	ANDREW KISS
Investigator	KAREN BRIDGES
Investigator	ROBERT LINDSAY
Investigator	KENDRA BERNHAGEN
Investigator	BLAS RIZZO
Investigator	MARIA SPARKS
Investigator	CYNTHIA SMITH

Associated Check List

<u>Checklist Name</u>	<u>Unit Name</u>
AIR COMPLAINT INVESTIGATION	July 13, 2017
AIR COMPLAINT INVESTIGATION	June 8, 2017
AIR COMPLAINT INVESTIGATION	June 15, 2017
AIR COMPLAINT INVESTIGATION	May 24, 2017 Team 2
AIR COMPLAINT INVESTIGATION	May 26, 2017
AIR COMPLAINT INVESTIGATION	May 18, 2017 Team 2
AIR COMPLAINT INVESTIGATION	May 19, 2017 Team 1
AIR COMPLAINT INVESTIGATION	May 18, 2017 Team 1
AIR COMPLAINT INVESTIGATION	June 30, 2017
AIR COMPLAINT INVESTIGATION	June 5, 2017
AIR COMPLAINT INVESTIGATION	May 17, 2017
AIR COMPLAINT INVESTIGATION	May 23, 2017 Team 1
AIR COMPLAINT INVESTIGATION	May 30, 2017
AIR COMPLAINT INVESTIGATION	June 13, 2017
AIR COMPLAINT INVESTIGATION	June 23, 2017
AIR COMPLAINT INVESTIGATION	October 16, 2017
AIR COMPLAINT INVESTIGATION	May 23, 2017 Team 2
AIR COMPLAINT INVESTIGATION	June 2, 2017
AIR COMPLAINT INVESTIGATION	May 16, 2017
AIR COMPLAINT INVESTIGATION	May 19, 2017 Team 2
AIR COMPLAINT INVESTIGATION	May 25, 2017
AIR COMPLAINT INVESTIGATION	May 23, 2017 Team 3
AIR COMPLAINT INVESTIGATION	July 19, 2017
AIR COMPLAINT INVESTIGATION	May 19, 2017 Team 3
AIR COMPLAINT INVESTIGATION	May 20, 2017
AIR COMPLAINT INVESTIGATION	September 8, 2017
AIR INVESTIGATION - EQUIPMENT	1415945
MONITORING AND SAMPLING revised 06/2013	
AIR COMPLAINT INVESTIGATION	May 24, 2017 Team 1

Investigation Comments:

I. INTRODUCTION

Due to database limitations, three investigations, TCEQ Investigation Nos. 1415945 (Citizen 1-50), 1430244 (Citizen 51-100), and 1430249 (Citizen 101-141), were created to associate all incidents. TCEQ Investigation Nos. 1430244 and 1430249 reference TCEQ Investigation 1415945.

Note: Throughout the investigation report and attachments, iron oxide, iron ore, metal particles, and metallic particles are used interchangeably.

INTRODUCTION:

The Texas Commission on Environmental Quality (TCEQ) Corpus Christi Region 14 (R14) Office, Air Section, conducts investigations regarding air quality. On May 16, 2017 through October 13, 2017, 141 complaints (Citizens 1-141) from citizens of the Portland, Texas community were received at the TCEQ R14 Office. The citizens alleged metallic particles on their property and vehicles from operations at Voestalpine Texas LLC-La Quinta Plant (Voestalpine). Voestalpine is located at 2800 Kay Bailey Hutchison Road in Portland, San Patricio County, Texas. Refer to Attachment 1 for a list of all the complaint incidents received during this investigation. The list includes citizen number, incident number, date received, investigation date, and the investigation number associated to each incident number.

In response to the citizens' concerns, TCEQ R14 Environmental Investigators (EIs) conducted onsite complaint investigations (AIRC MPL) on 21 days from May 16, 2017 through October 16, 2017. The purpose of the AIRC MPL investigations was to determine if nuisance conditions were occurring, to identify the source upon detection, and to determine if operations were conducted in compliance with TCEQ rules and regulations. Note: The operations of other facilities in the surrounding area were reviewed as potential sources; however, they were not determined to be the source of the metallic particles.

The TCEQ R14 staff that conducted and participated in the investigations included Ms. Susan Hoelscher-Air Section EI, Ms. Ashley (Scott) Fuqua-Air Section EI, Mr. Kelly Ruble-Air Section Manager, Mr. Mike Riff-Air Section EI, Ms. Cindy Smith-Air Section EI, Mr. Andrew Kiss-Air Section EI, Mr. Robert Lindsay-Air Section EI, Ms. Kendra Bernhagen-Waste Section EI, Ms. Karen Bridges-Waste Section EI, Mr. Christopher Rezendes-Intern, Mr. Travis Prater-Water Section Work Leader, Mr. Rich Heitzenrater-Waste Section EI, Ms. Nicola Cooper-Intern, Mr. Thomas Haney-Air Section EI, Mr. Corey Burke-Waste Section EI, Mr. Blas Rizzo-Water Section EI, Ms. Maria "Cece" Sparks-Air Section EI, Ms. Jessica Fox-Air Section EI, Ms. Renae Diguardi-Emergency Response Coordinator, Mr. Trent Pinion-Air Section EI, Ms. Susan Clewis-Regional Director, and Mr. Guadalupe "Sonny" Lopez-Air Section Work Leader. An additional TCEQ participant was Mr. Jess Robinson-Staff Attorney.

The contacts for Voestalpine included Ms. Shannon Parham-Environmental Manager, Mr. Dominick Hernandez-Process Water Coordinator/Environmental Specialist, Mr. Tim Vanlandingham-Head of Safety, Security & Emergency, Mr. Helmut Schwarz-Chief Technical Officer, Mr. Michael Chernenkoff-Attorney at Law/Outside Counsel, and Ms. Lara Pringle-Attorney at Law/Outside Counsel.

DAILY NARRATIVE:

The daily narrative is outlined below by date. Tape lift samples were initially obtained at each residence. However, due to the number of complaints that were continuously received, the EIs began obtaining tape lift samples only if the particles could not be confirmed to have magnetic properties. Note: The citizens initially identified the magnetic properties of the particles located on their property. There were 28 tape lift samples initially collected with a total of 39 tape lift samples collected throughout the entire investigation. If the EIs could document the metallic particles at the citizen's residence without obtaining a tape lift sample, the citizen was noted as impacted by the metallic particles consistent with the metallic particles identified on the other citizens' residences.

The citizens' vehicles had a gritty, sandpaper feeling to touch and/or had an accumulation of metallic particles that were confirmed to have magnetic properties consistent with the metallic particles documented on the

citizens' residences. It appeared that the metallic particles had penetrated the clear coat and paint coat which was causing rust spots to form on the citizens' vehicles. It was noted by the EIs and the citizens that there were two different colors of metallic particles, reddish and black, on their property, and the metallic particles varied in size by, what appeared to be, distance from the alleged source. The citizens were concerned of possible health effects of the metallic particles, and numerous citizens indicated noticeable health problems since the metallic particles had been noted on their property. The TCEQ Toxicology Division noted that the tape lift samples contained metallic particles less than 10 microns in size. Particles less than 10 microns in size can be inhaled into the respiratory tract and can cause health effects such as respiratory irritation and asthma exacerbation. The TCEQ does not have monitored levels (concentration data) of the metallic particles, so the TCEQ Toxicology Division cannot comment on the likelihood of health effects occurring from exposure to the particles. Many citizens documented the metallic particles in their pools, in their pets' water bowls, and on their children's outdoor play equipment. The citizens would be outdoors and/or children/pets would play outside, and they would get covered in the metallic particles on the grass and outdoor structures (e.g. black feet). The metallic particles were documented at citizens' residences located up to approximately three miles to the northwest, west, and southwest of Voestalpine. Southeast, east, and northeast winds would have impacted these areas. The prevailing wind direction is southeast; however, during the time period of this investigation there were numerous days when the wind direction was east and northeast. It should also be noted that there were numerous days over the time period of this investigation that the Portland community received rain/thunderstorms; however, the metallic particles were still documented on the citizens' property after the rain/thunderstorms. Refer to Attachment 2 for photographs obtained during the course of the investigation.

Note: All of the tape lift samples collected at the citizens' residences were compared to four reference samples, designated as Sample Nos. 1705011-009RS, 1705011-010RS, 1705011-011RS, and 1705011-012RS, obtained on May 17, 2017 from four of Voestalpine's outdoor stockpiles. The Laboratory Analysis Results of the reference samples, Request No. 1705011, are given in Attachment 3, and photographs of the reference sample locations are given in Attachment 4.

May 16, 2017

Two TCEQ teams responded to four complaints referred to the TCEQ R14 Office by the City of Portland, Texas. Ms. Hoelscher (Team 1) responded to two complaints (Citizen 1-2), and Ms. Hoelscher and Ms. Fuqua (Team 2) responded to two complaints (Citizen 3-4). At the time of the investigation, meteorological conditions consisted of southeast winds at 18 miles per hour (mph) with 30 mph wind gusts and an ambient air temperature of 79 degrees Fahrenheit.

Citizen 1-Incident No. 257967

Tape lift samples were obtained from the front house siding and a front window glass at Citizen 1's residence, designated as Sample Nos. 1705011-001 and 1705011-002, respectively. Citizen 1 also demonstrated the magnetic property of the metallic particles to the EI. The Laboratory Analysis Results of the tape lift samples, Request No. 1705011, are given in Attachment 3. The results indicated the following:

Sample No. 1705011-001 (lightly loaded) contained between 51 and 60% metal particles. The metal particles ranged in color from black to reddish. The color was consistent with all the field samples and reference samples. Metal particles (reddish) ranged in size from 1 to 800 microns. Metal particles (black) ranged in size from 5 to 400 microns. The sample also contained between 31 and 40% common clays and minerals. Other particles present in quantities less than 5% included carbonaceous material, fungal spores, yellow paint overspray, plant stellate hairs, and pollen. The energy dispersive spectroscopy (EDS) analysis of a metal particle indicated the primary peaks in the x-ray spectra of the metal particle was consistent with the reference samples submitted in Request No. 1705011.

Sample No. 1705011-002 (lightly loaded) contained between 41 and 50% metal particles. Metal particles (reddish) ranged in size from 1 to 800 microns. Metal particles (black) ranged in size from 5 to 400 microns. The sample contained between 21 and 30% common clays and minerals and between 5 and 20% fungal spores. Other particles present in quantities less than 5% included plant stellate hairs, plant trichomes, pollen, and rubber dust. The x-ray spectra of the metal particles were consistent with the reference samples submitted in Request No. 1705011.

Citizen 2-Incident No. 258031

Tape lift samples were obtained from an outdoor light glass cover and a plastic storage box on the front porch at

Citizen 2's residence, designated as Sample Nos. 1705011-003 and 1705011-004, respectively. The Laboratory Analysis Results of the tape lift samples, Request No. 1705011, are given in Attachment 3. The results indicated the following:

Sample No. 1705011-003 (lightly loaded) contained between 5 and 20% metal particles. Metal particles (reddish) ranged in size from 1 to 800 microns. Metal particles (black) ranged in size from 5 to 400 microns. The sample also contained between 31 and 40% common clays and minerals. Other particles present in quantities less than 5% included carbonaceous material, fungal spores, plant stellate hairs, and pollen.

Sample No. 1705011-004 (moderately loaded) contained between 51 and 60% metal particles. Metal particles (reddish) ranged in size from 1 to 800 microns. Metal particles (black) ranged in size from 5 to 400 microns. The sample contained between 31 and 40% common clays and minerals. Other particles present in quantities less than 5% included carbonaceous material, fungal spores, plant stellate hairs, and pollen. The x-ray spectra of the metal particles were consistent with the reference samples submitted in Request No. 1705011.

Citizen 3-Incident No. 258027

Tape lift samples were obtained from the front door window sill and a front window glass at Citizen 3's residence, designated as Sample Nos. 1705011-005 and 1705011-006, respectively. The Laboratory Analysis Results of the tape lift samples, Request No. 1705011, are given in Attachment 3. The results indicated the following:

Sample No. 1705011-005 (lightly loaded) contained between 61 and 71% metal particles. Metal particles (reddish) ranged in size from 1 to 800 microns. Metal particles (black) ranged in size from 5 to 400 microns. The sample also contained between 21 and 30% common clays and minerals. Other particles present in quantities less than 5% included fungal spores, plant fibers, and pollen. The x-ray spectra of the metal particles were consistent with the reference samples submitted in Request No. 1705011.

Sample No. 1705011-006 (lightly loaded) contained between 61 and 70% metal particles. Metal particles (reddish) ranged in size from 1 to 800 microns. Metal particles (black) ranged in size from 5 to 400 microns. The sample contained between 5 and 20% common clays and minerals and between 5 and 20% plant fibers. Other particles present in quantities less than 5% included pollen. The x-ray spectra of the metal particles were consistent with the reference samples submitted in Request No. 1705011.

Citizen 4-Incident No. 258034

Tape lift samples were obtained from an outdoor light glass cover and a front window glass at Citizen 4's residence, designated as Sample Nos. 1705011-007 and 1705011-008, respectively. The Laboratory Analysis Results of the tape lift samples, Request No. 1705011, are given in Attachment 3. The results indicated the following:

Sample No. 1705011-007 (lightly loaded) contained between 21 and 30% metal particles. Metal particles (reddish) ranged in size from 1 to 700 microns. Metal particles (black) ranged in size from 5 to 300 microns. The sample also contained between 41 and 50% insect parts and between 5 and 20% common clays and minerals. Other particles present in quantities less than 5% included pollen. The x-ray spectra of the metal particles were consistent with the reference samples submitted in Request No. 1705011.

Sample No. 1705011-008 (lightly loaded) contained over 80% metal particles. Metal particles (reddish) ranged in size from 1 to 700 microns. Metal particles (black) ranged in size from 5 to 400 microns. The sample contained between 5 and 20% common clays and minerals. Other particles present in quantities less than 5% included carbonaceous material and plant stellate hairs. The x-ray spectra of the metal particles were consistent with the reference samples submitted in Request No. 1705011.

May 17, 2017

Ms. Hoelscher conducted an onsite investigation at Voestalpine to obtain reference samples for comparison to the tape lift samples obtained at the citizens' residences. At the time of the investigation, meteorological conditions consisted of southeast winds at 9 mph with 17 mph wind gusts and an ambient air temperature of 78 degrees Fahrenheit.

Ms. Hoelscher met with Mr. Vanlandingham and discussed the complaint allegations while obtaining the bulk reference samples from the outside stockpiles. Mr. Vanlandingham demonstrated the magnetic property of the

metal particles. It was noted that the reddish colored metal particles were unprocessed, and the black colored metal particles were processed. The reference samples were designated as Sample Nos. 1705011-009RS (remet pellets), 1705011-010RS (remet fines), 1705011-011RS (fines unprocessed pellets), and 1705011-012RS (HBI (hot briquette iron) fines). Note: Remet is the off-specification product produced during plant start-up or process upset. The Laboratory Analysis Results of the reference samples, Request No. 1705011, are given in Attachment 3, and photographs of the reference sample locations are given in Attachment 4. The results indicated the following:

Sample No. 1705011-009RS (bulk sample) contained over 80% metal particles. The remet pellets consisted of large black metal particles over 1 centimeter in diameter. The EDS analysis of the remet pellets (metal particle) indicated the primary peaks in the x-ray spectrum were oxygen and iron.

Sample No. 1705011-010RS (bulk sample) contained over 80% metal particles. The remet fines consisted of metal particles that varied in color from black to reddish. Metal particles (reddish) ranged in size from 1 to 5000 microns. Metal particles (black) ranged in size from 5 to 400 microns. Other particles present in quantities less than 5% included common clays and minerals. The EDS analysis of the remet fines particle (metal particle) indicated the primary peaks in the x-ray spectrum were oxygen and iron. The EDS analysis of another remet fines particle indicated the primary peaks in the x-ray spectrum were oxygen, calcium, and iron.

Sample No. 1705011-011RS (bulk sample) contained over 80% metal particles. The unprocessed fines pellets consisted of metal particles that varied in color from black to reddish. Metal particles (reddish) ranged in size from 1 to 5000 microns. Metal particles (black) ranged in size from 5 to 1000 microns. The EDS analysis of the unprocessed fines pellets (metal particle) indicated the primary peaks in the x-ray spectrum were oxygen and iron.

Sample No. 1705011-012RS (bulk sample) contained over 80% metal particles. The HBI fines consisted of metal particles that varied in color from black to reddish. Metal particles (reddish) ranged in size from 1 to 5000 microns. Metal particles (black) ranged in size from 5 to 400 microns. The EDS analysis of the HBI fines (metal particle) indicated the primary peaks in the x-ray spectrum were oxygen and iron.

Mr. Vanlandingham provided a process description and the Safety Data Sheets (SDS) for the iron ore pellets and HBI via email. See Attachment 5 for the process description and SDSs.

Voestalpine also analyzed samples of three of the stockpiles (HBI Fines, Pellet Fines, Remet Fines), four offsite locations (A, B, C, D) (three citizens' residences; one residence was sampled twice), and one sample (plastic bag) collected by a citizen and submitted to Voelstapine. The samples were analyzed for the presence of metal elements. The Voestalpine Texas Site Dust Health Risk Analysis is referenced in Attachment 6 and is located in the TCEQ R14 Office confidential files.

Ms. Fuqua responded to three complaints (Citizen 5-7) received at the TCEQ R14 Office. At the time of the investigation, meteorological conditions consisted of southeast winds at 14 mph with 25 mph wind gusts and an ambient air temperature of 79 degrees Fahrenheit.

Citizen 5-Incident No. 258023

Tape lift samples were obtained from the back door window glass and the glass tabletop (cleaned three days prior) on the back patio at Citizen 5's residence, designated as Sample Nos. 1705012-001 and 1705012-002, respectively. The Laboratory Analysis Results of the tape lift samples, Request No. 1705012, are given in Attachment 7. The results indicated the following:

Sample No. 1705012-001 (lightly loaded) contained between 5 and 20% metal particles. The metal particles ranged in color from black to reddish and ranged in size from 20 to 120 microns. Metal particles were consistent in appearance with all other field samples in this request (1705012) and with reference samples 1705011-010RS, -011RS, and -012RS. The sample also contained between 61 and 70% common clays and minerals, between 5 and 20% fungal spores, and between 5 and 20% pollen. The x-ray spectra of a metal particle was consistent with the reference samples submitted in Request No. 1705011.

Sample No. 1705012-002 (lightly loaded) contained less than 5% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 5 to 40 microns. The sample also contained between 71 and 80% common clays and minerals, between 5 and 20% pollen, and between 5 and 20% plant material. Other particles present in quantities less than 5% included fungal spores, plant trichomes, and starch grains. The x-ray spectra of the metal particles were consistent with the reference samples submitted in Request No. 1705011.

Citizen 6-Incident No. 258012

Tape lift samples were obtained from the glass tabletop (cleaned three days prior) on the back deck and a front window glass at Citizen 6's residence, designated as Sample Nos. 1705012-003 and 1705012-004, respectively. It was also noted that it appeared the metallic particles had settled in the bottom of Citizen 6's pool. The Laboratory Analysis Results of the tape lift samples, Request No. 1705012, are given in Attachment 7. The results indicated the following:

Sample No. 1705012-003 (heavily loaded) contained between 41 and 50% metal particles. The metal particles ranged in color from black to reddish and ranged in size from 1 to 120 microns. The sample also contained between 41 and 50% common clays and minerals. Other particles present in quantities less than 5% included fungal material, plant trichomes, and pollen. The x-ray spectra of metal particles were consistent with the reference samples submitted in Request No. 1705011.

Sample No. 1705012-004 (moderately loaded) contained between 21 and 30% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 1 to 90 microns. The sample also contained between 51 and 60% fungal material and between 21 and 30% common clays and minerals. Other particles present in quantities less than 5% included fungal spores and pollen. The x-ray spectra of metal particles were consistent with the reference samples submitted in Request No. 1705011.

Citizen 7-Incident No. 258039

Tape lift samples were obtained from the backyard pool ladder and a front window glass at Citizen 7's residence, designated as Sample Nos. 1705012-005 and 1705012-006, respectively. The metallic particles had settled on the bottom of the pool, and Citizen 7 stated that the pool is vacuumed daily. The Laboratory Analysis Results of the tape lift samples, Request No. 1705012, are given in Attachment 7. The results indicated the following:

Sample No. 1705012-005 (heavily loaded) contained between 71 and 80% metal particles. The metal particles ranged in color from black to reddish and ranged in size from 1 to 130 microns. The sample also contained between 5 and 20% common clays and minerals and between 5 and 20% fungal material. Other particles present in quantities less than 5% included burned vegetation, plant trichomes, pollen, and starch grains. The x-ray spectra of metal particles was consistent with the reference samples submitted in Request No. 1705011.

Sample No. 1705012-006 (lightly loaded) contained between 31 and 40% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 1 to 100 microns. The sample also contained between 41 and 50% fungal material, between 5 and 20% common clays and minerals, and between 5 and 20% fungal spores. Other particles present in quantities less than 5% included pollen and plant material. The x-ray spectra of metal particles was consistent with the reference samples submitted in Request No. 1705011.

May 18, 2017

Two TCEQ teams responded, concurrently, to 12 complaints. Ms. Fuqua (Team 1) responded to five complaints (Citizen 8-12), and Ms. Hoelscher and Mr. Ruble (Team 2) responded to seven complaints (Citizen 13-19). At the time of the investigation, meteorological conditions consisted of southeast winds at 15 mph with 25 mph wind gusts and an ambient air temperature of 82 degrees Fahrenheit.

Citizen 8-Incident No. 258158

Tape lift samples were obtained from a front window glass and the backyard pool ledge at Citizen 8's residence, designated as Sample Nos. 1705014-006 and 1705014-007, respectively. It was also noted that it appeared the metallic particles had settled in the bottom of Citizen 8's pool. The Laboratory Analysis Results of the tape lift samples, Request No. 1705014, are given in Attachment 8. The results indicated the following:

Sample No. 1705014-006 (heavily loaded) contained between 5 and 20% metal particles. The metal particles ranged in color from black to reddish and ranged in size from 1 to 100 microns. The sample also contained between 31 and 40% fungal spores, between 21 and 30% common clays and minerals, and between 21 and 30% plant material. Other particles present in quantities less than 5% included plant fibers, plant stellate hairs, plant trichomes, and pollen. The x-ray spectra of a metal particle was consistent with the reference samples submitted in Request No. 1705011.

Sample No. 1705014-007 (heavily loaded) contained less than 5% metal particles. The metal particles ranged in

color from black to reddish and ranged in size from 1 to 300 microns. The sample also contained over 80% common clays and minerals and between 5 and 20% weathered paint. Other particles present in quantities less than 5% included plant fibers. The x-ray spectra of a metal particle was consistent with the reference samples submitted in Request No. 1705011.

Citizen 9-Incident No. 258143

Tape lift samples were obtained from the front window glass and the garage door siding at Citizen 9's residence, designated as Sample Nos. 1705013-007 and 1705014-001, respectively. The Laboratory Analysis Results of the tape lift samples, Request No. 1705013 and 1705014, are given in Attachment 9 and 8, respectively. The results indicated the following:

Sample No. 1705013-007 (lightly loaded) contained less than 5% metal particles. The metal particles ranged in color from black to reddish and ranged in size from 1 to 40 microns. The sample also contained between 61 and 70% fungal spores and between 21 and 30% paper fibers. Other particles present in quantities less than 5% included plant stellate hairs and plant material. The x-ray spectra of metal particles was consistent with the reference samples submitted in Request No. 1705011.

Sample No. 1705014-001 (lightly loaded) contained less than 5% metal particles. The metal particles ranged in color from black to reddish and ranged in size from 1 to 100 microns. The sample also contained over 80% fungal spores and between 5 and 20% paper fibers. Other particles present in quantities less than 5% included common clays and minerals and rubber dust. The x-ray spectra of metal particles were consistent with the reference samples submitted in Request No. 1705011.

Citizen 10-Incident No. 258147

Tape lift samples were obtained from the front window glass and the front door at Citizen 10's residence, designated as Sample Nos. 1705014-002 and 1705014-003, respectively. The Laboratory Analysis Results of the tape lift samples, Request No. 1705014, are given in Attachment 8. The results indicated the following:

Sample No. 1705014-002 (moderately loaded) contained between 5 and 20% metal particles. The metal particles ranged in color from black to reddish and ranged in size from 1 to 300 microns. The sample also contained between 21 and 30% common clays and minerals, between 21 and 30% fungal spores, and between 21 and 30% plant fibers. Other particles present in quantities less than 5% included plant stellate hairs, plant trichomes, pollen, starch grains, and rubber dust. The x-ray spectra of a metal particle was consistent with the reference samples submitted in Request No. 1705011.

Sample No. 1705014-003 (lightly loaded) contained less than 5% metal particles. The metal particles ranged in color from black to reddish and ranged in size from 1 to 300 microns. The sample contained between 31 and 40% plant material, between 21 and 30% common clays and minerals, between 5 and 20% fungal spores, and between 5 and 20% plant stellate hairs. Other particles present in quantities less than 5% included animal hair, plant trichomes, pollen, and rubber dust. The x-ray spectra of a metal particle was consistent with the reference samples submitted in Request No. 1705011.

Citizen 11-Incident No. 258160

Tape lift samples were obtained from the front door window glass and front window screen frame at Citizen 11's residence, designated as Sample Nos. 1705014-004 and 1705014-005, respectively. The Laboratory Analysis Results of the tape lift samples, Request No. 1705014, are given in Attachment 8. The results indicated the following:

Sample No. 1705014-004 (lightly loaded) contained less than 5% metal particles. The metal particles ranged in color from black to reddish and ranged in size from 1 to 40 microns. The sample contained between 41 and 50% common clays and minerals, between 41 and 50% fungal spores, and between 5 and 20% plant fibers. The x-ray spectra of a metal particle was consistent with the reference samples submitted in Request No. 1705011.

Sample No. 1705014-005 (lightly loaded) contained between 5 and 20% metal particles. The metal particles ranged in color from black to reddish and ranged in size from 1 to 120 microns. The sample contained between 41 and 50% common clays and minerals and between 21 and 30% plant material. Other particles present in quantities less than 5% included plant fibers, plant stellate hairs, plant trichomes, and pollen. The x-ray spectra of the metal particles were consistent with the reference samples submitted in Request No. 1705011.

Citizen 12-Incident No. 258146

Samples of metallic particles collected on the back window sill of Citizen 12's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 13-Incident No. 258172

A tape lift sample was obtained from the outside metal window sill at Citizen 13's workplace, designated as Sample No. 1705013-001. The Laboratory Analysis Results of the tape lift sample, Request No. 1705013, are given in Attachment 9. The results indicated the following:

Sample No. 1705013-001 (lightly loaded) contained over 80% metal particles. The metal particles ranged in color from black to reddish and ranged in size from 1 to 200 microns. The sample also contained between 5 and 20% common clays and minerals. Other particles present in quantities less than 5% included fungal spores, plant stellate hairs, pollen, and rubber dust. The x-ray spectra of the metal particles was consistent with the reference samples submitted in Request No. 1705011.

Citizen 14-Incident No. 258138

Tape lift samples were obtained from an outdoor light glass cover, a front window sill, and the trunk of a car at Citizen 14's residence, designated as Sample Nos. 1705013-002, 1705013-003, and 1705013-004, respectively. The Laboratory Analysis Results of the tape lift samples, Request No. 1705013, are given in Attachment 9. The results indicated the following:

Sample No. 1705013-002 (heavily loaded) contained less than 5% metal particles. The metal particles ranged in color from black to reddish and ranged in size from 1 to 120 microns. The sample also contained over 80% white weathered paint. Other particles present in quantities less than 5% included common clays and minerals. The x-ray spectra of the metal particles was consistent with the reference samples submitted in Request No. 1705011.

Sample No. 1705013-003 (heavily loaded) contained between 61 and 70% metal particles. The metal particles ranged in color from black to reddish and ranged in size from 1 to 100 microns. The sample also contained between 21 and 30% common clays and minerals and between 5 and 20% weathered paint. Other particles present in quantities less than 5% included burned vegetation, fungal spores, plant stellate hairs, and pollen. The x-ray spectra of the metal particles was consistent with the reference samples submitted in Request No. 1705011.

Sample No. 1705013-004 (lightly loaded) contained between 61 and 70% metal particles. The metal particles ranged in color from black to reddish and ranged in size from 1 to 200 microns. The sample also contained between 21 and 30% common clays and minerals. Other particles present in quantities less than 5% included plant fibers, plant trichomes, pollen, and rubber dust. The x-ray spectra of the metal particles was consistent with the reference samples submitted in Request No. 1705011.

Citizen 15-Incident No. 258149

Samples of metallic particles collected on a front window sill of Citizen 15's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 16-Incident No. 258170

Tape lift samples were obtained from the front window sill and the front door at Citizen 16's residence, designated as Sample Nos. 1705013-005 and 1705013-006, respectively. The Laboratory Analysis Results of the tape lift samples, Request No. 1705013, are given in Attachment 9. The results indicated the following:

Sample No. 1705013-005 (moderately loaded) contained between 41 and 50% metal particles. The metal particles ranged in color from black to reddish and ranged in size from 1 to 200 microns. The sample also contained between 31 and 40% weathered paint and between 5 and 20% common clays and minerals. Other particles present in quantities less than 5% included paint overspray, plant stellate hairs, and pollen. The x-ray spectra of the metal particles was consistent with the reference samples submitted in Request No. 1705011.

Sample No. 1705013-006 (lightly loaded) contained between 41 and 50% metal particles. The metal particles ranged in color from black to reddish and ranged in size from 1 to 120 microns. The sample also contained between 51 and 60% common clays and minerals. Other particles present in quantities less than 5% included carbonaceous material, fungal spores, and plant fibers. The x-ray spectra of the metal particles was consistent with the reference samples submitted in Request No. 1705011.

Citizen 17-Incident No. 258140

Samples of metallic particles collected on a BBQ pit located in the backyard and a back window sill of Citizen 17's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 18-Incident No. 258165

Samples of metallic particles collected on a front window sill of Citizen 18's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences. The metal particles were also confirmed on the wheel cover of a trailer parked in the front driveway that is only used about once a month.

Citizen 19-Incident No. 258141

Samples of metallic particles collected on a piece of angle iron in the backyard of Citizen 19's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences. Citizen 19 stated that the angle iron had only been in the backyard for about a week. It was also noted that Citizen 19's dog had also been sick (toxins) starting two days prior and was slowly recovering.

May 19, 2017

Three TCEQ teams responded, concurrently, to 36 complaints. Ms. Hoelscher and Mr. Kiss (Team 1) responded to 18 complaints (Citizen 20-37), Mr. Riff and Ms. Smith (Team 2) responded to nine complaints (Citizen 38-46), and Ms. Fuqua and Mr. Lindsay (Team 3) responded to nine complaints (Citizen 47-55). Team 1 was accompanied by Team 2 for the first two complaints (Citizen 20 and 21). At the time of the investigation, meteorological conditions consisted of southeast winds at 17 mph with 30 mph wind gusts and an ambient air temperature of 82 degrees Fahrenheit.

Citizen 20-Incident No. 258144

Samples of metallic particles collected off of a junction box on the side of Citizen 20's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 21-Incident No. 258162

Samples of metallic particles collected on a front window sill of Citizen 21's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 22-Incident No. 258169

Samples of metallic particles collected on a front window ledge of Citizen 22's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 23-Incident No. 258176

Team 1 attempted to contact Citizen 23; however, Team 1 was unable to reach Citizen 23 that day (May 19, 2017). See the May 20, 2017 section below for more information.

Citizen 24-Incident No. 258201

Samples of metallic particles collected on a front window ledge of Citizen 24's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 25-Incident No. 258243

Samples of metallic particles collected on a front window sill of Citizen 25's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 26-Incident No. 258245

Samples of metallic particles collected on a front window sill of Citizen 26's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences. Citizen 26 indicated that the metallic particles were also on the grass blades in the front yard.

Citizen 27-Incident No. 258251

Samples of metallic particles collected on a front window glass of Citizen 27's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 28-Incident No. 258235

Tape lift samples were obtained from the front window glass and an outdoor light glass cover at Citizen 28's residence, designated as Sample Nos. 1705016-003 and 1705016-004, respectively. The Laboratory Analysis Results of the tape lift samples, Request No. 1705016, are given in Attachment 10. The results indicated the following:

Sample No. 1705016-003 (lightly loaded) contained between 31 and 40% common clays and minerals, between 31 and 40% fungal material, between 5 and 20% plant fibers, and between 5 and 20% plant material. Other particles present in quantities less than 5% included pollen.

Sample No. 1705016-004 (moderately loaded) contained less than 5% metal particles. Only two metal particles were found on the subsample. The metal particles ranged in color from reddish to black and ranged in size from 2 to 40 microns. The sample also contained between 61 and 70% fungal spores, between 21 and 30% common clays and minerals, and between 5 and 20% plant fibers. Other particles present in quantities less than 5% included a spider web. The x-ray spectra of a metal particle was consistent with the reference samples submitted in Request No. 1705011.

Citizen 29-Incident No. 258250

Tape lift samples were obtained from a front window glass and an outdoor light plastic cover at Citizen 29's residence, designated as Sample Nos. 1705016-001 and 1705016-002, respectively. The Laboratory Analysis Results of the tape lift samples, Request No. 1705016, are given in Attachment 10. The results indicated the following:

Sample No. 1705016-001 (lightly loaded) contained between 5 and 20% metal particles. Only three metal particles were found on the subsample. Metal particles ranged in color from black to reddish and ranged in size from 5 to 150 microns. Metal particles were consistent in appearance with metal particles identified in other field samples in this request (1705016) and with reference samples 1705011-010RS, -011RS, and -012RS. The sample also contained between 31 and 40% common clays and minerals, between 31 and 40% fungal spores, and between 5 and 20% plant stellate hairs. Other particles present in quantities less than 5% included plant fibers, pollen, and rubber dust. The x-ray spectra of a metal particle was consistent with the reference samples submitted in Request No. 1705011.

Sample No. 1705016-002 (heavily loaded) contained between 5 and 20% metal particles. Only one metal particle was found on the subsample. This metal particle was colored black with a reddish edge and was 60 microns. The sample also contained over 80% fungal spores. Other particles present in quantities less than 5% included common clays and minerals, white paint overspray, plant fibers, and plant stellate hairs.

Citizen 30-Incident No. 258238

Samples of metallic particles collected on a front window ledge of Citizen 30's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 31-Incident No. 258232

Samples of metallic particles collected on a front window sill of Citizen 31's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 32-Incident No. 258248

Samples of metallic particles collected on a front window screen framework of Citizen 32's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 33-Incident No. 258242

Samples of metallic particles collected on a front window sill of Citizen 33's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 34-Incident No. 258244

Samples of metallic particles collected on a front window sill of Citizen 34's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 35-Incident No. 258264

Samples of metallic particles collected on a front window ledge of Citizen 35's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences. See the May 24, 2017 section below for more information.

Citizen 36-Incident No. 258283

Team 1 attempted to contact Citizen 36; however, Team 1 was unable to reach Citizen 36 that day (May 19, 2017). See the May 20, 2017 and May 23, 2017 sections below for more information.

Citizen 37-Incident No. 258285

Samples of metallic particles collected on a front window sill of Citizen 37's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 38-Incident No. 258166

Samples of metallic particles collected on a glass window glass pane on the side of Citizen 38's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 39-Incident No. 258173

Samples of metallic particles collected on a front window ledge of Citizen 39's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 40-Incident No. 258202

Samples of metallic particles collected on a BBQ pit at Citizen 40's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 41-Incident No. 258174

Samples of metallic particles collected on a front window ledge of Citizen 41's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 42-Incident No. 258177

Samples of metallic particles collected on a front window ledge of Citizen 42's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 43-Incident No. 258299

Samples of metallic particles collected on a front window ledge of Citizen 43's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

On May 23, 2017, Citizen 43 submitted citizen collected evidence (CCE) (video) indicating that the metallic particles were inside their residence in the kitchen air conditioner (AC) vent.

On July 14, 2017, Citizen 43 submitted CCE (videos) indicating the ongoing release/accumulation of the metallic particles. See below for a timeline of events from the CCE indicating the ongoing release/accumulation of the metallic particles.

-June 7, 2017: Stainless steel dog bowl was cleaned/scrubbed, filled with fresh water, and left in the middle of the backyard from 6 am until 6 pm. After 12 hours, Citizen 43 confirmed the magnetic property of the metallic particles accumulated in the dog bowl.

-June 8, 2017: Citizen 43's vehicle had a complete detail.

-June 15, 2017: Citizen 43 confirmed the magnetic property of the metallic particles accumulated on the vehicle which had been detailed a week before.

-June 16, 2017: Citizen 43's vehicle had a complete detail.

-June 22, 2017: Citizen 43 confirmed the magnetic property of the metallic particles accumulated on the vehicle which had been detailed the Friday before.

LA QUINTA PLANT - CORPUS CHRISTI ETJ

5/16/2017 to 10/16/2017 Inv. # - 1415945

Page 14 of 29

-June 24, 2017: Citizen 43 power washed the front and back of the house including doors, windows, siding, sidewalks, patio, etc. The exterior front alcove, front door, and front sidewalk were power washed twice; however, metallic particles with a magnetic property were still confirmed on the front sidewalk and front siding after the double wash.

-July 12, 2017: After power washing on June 24, 2017, an accumulation of metallic particles with a magnetic property were confirmed by Citizen 43 on a front window sill, a back patio window sill, and a back patio electrical box indicating an ongoing release.

Refer to Attachment 11 for snapshots of the CCE videos (representative sample) submitted indicating the impact and ongoing release of metallic particles. Note: The original CCE videos and affidavits are located in the TCEQ R14 Office confidential files.

Citizen 44-Incident No. 258226

Team 2 attempted to contact Citizen 44; however, Citizen 44 was out of town and there was limited access to the property. See the May 20, 2017 and May 23, 2017 sections below for more information.

Citizen 45-Incident No. 258230

Samples of metallic particles collected on a BBQ grill at Citizen 45's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 46-Incident No. 258263

Samples of metallic particles collected on a front window ledge of Citizen 46's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 47-Incident No. 258142

Samples of metallic particles collected on a patio table at Citizen 47's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 48-Incident No. 258156

Samples of metallic particles collected on a window of Citizen 48's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 49-Incident No. 258150

Samples of metallic particles collected on a window ledge of Citizen 49's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 50-Incident No. 258171

Samples of metallic particles collected on a window ledge of Citizen 50's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences. It also appeared that the metallic particles were settled in and around the pool.

Citizen 51-Incident No. 258227

Samples of metallic particles collected on a window sill, window ledge, and the garage door at Citizen 51's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 52-Incident No. 258167

Samples of metallic particles collected on a junction box near the front door, a window screen framework, a mini refrigerator, and a BBQ pit at Citizen 52's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 53-Incident No. 258200

Samples of metallic particles collected on a window ledge of Citizen 53's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences. It also appeared that metal particles had settled on the bottom of the pool.

Citizen 54-Incident No. 258203

Tape lift samples were obtained from a front window glass and the back garage door at Citizen 54's residence,

designated as Sample Nos. 1705016-005 and 1705016-006, respectively. The Laboratory Analysis Results of the tape lift samples, Request No. 1705016, are given in Attachment 9. The results indicated the following:

Sample No. 1705016-005 (moderately loaded) contained less than 5% metal particles. Only two metal particles were found on the subsamples. Metal particles ranged in color from reddish to black and ranged in size from 10 to 45 microns. The sample also contained between 71 and 80% common clays and minerals and between 21 and 30% fungal spores. Other particles present in quantities less than 5% included plant fibers, plant stellate hairs, pollen, and rubber dust.

Sample No. 1705016-006 (heavily loaded) contained less than 5% metal particles. Metal particles ranged in color from reddish to black and ranged in size from 40 to 80 microns. The sample also contained between 51 and 60% plant/wood fibers and between 31 and 40% common clays and minerals and between 5 and 20% fungal spores. Other particles present in quantities less than 5% included fungal spores, animal hair, white paint chips, white paint overspray, plant stellate hairs, pollen, and rubber dust. The x-ray spectra of metal particles were consistent with the reference samples submitted in Request No. 1705011.

Citizen 55-Incident No. 258223

Samples of metallic particles collected on a window sill of Citizen 55's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences. It also appeared that the metal particles were settled in the bottom of the pool.

May 20, 2017

Mr. Riff and Ms. Bernhagen responded to four dust complaints (Citizen 56-59) as well as the three citizens (Citizen 23, 36, 44) that were unable to be reached or had limited access to the property on the previous day (May 19, 2017). At the time of the investigation, meteorological conditions consisted of east winds at 12 mph with 20 mph wind gusts and an ambient air temperature of 83 degrees Fahrenheit.

Citizen 23-Incident No. 258176

Samples of metallic particles collected on a front window shutter of Citizen 23's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 36-Incident No. 258283

Based upon the response to the complaint, it was determined that the incorrect address had been noted for Citizen 36. Another attempt was made to contact Citizen 36 via phone; however, Citizen 36 was unable to be reached. See the May 19, 2017 and May 23, 2017 sections for more information.

Citizen 44-Incident No. 258226

Another attempt was made to contact Citizen 44; however, Citizen 44 was unable to be reached. See the May 19, 2017 and May 23, 2017 sections for more information.

Citizen 56-Incident No. 258420

Samples of metallic particles collected on a back window of Citizen 56's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 57-Incident No. 258308

Samples of metallic particles collected on a front window of Citizen 57's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 58-Incident No. 258309

Samples of metallic particles collected on a side window of Citizen 58's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 59-Incident No. 258287

Samples of metallic particles collected on a front window of Citizen 59's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

May 23, 2017

Three TCEQ teams responded, concurrently, to 24 dust complaints as well as the two citizens (Citizen 36 and 44) that had been unable to be reached on the previous two days (May 19, 2017 and May 20, 2017). Ms. Hoelscher, Ms. Bridges, and Mr. Rezendes (Team 1) responded to nine complaints (Citizen 60-68), Ms. Fuqua, Mr. Prater, and Mr. Heitzenrater (Team 2) responded to eight complaints (Citizen 36, 44, 69-74), and Mr. Riff, Ms. Bernhagen, and Ms. Cooper (Team 3) responded to nine complaints (Citizen 75-83). At the time of the investigation, meteorological conditions consisted of northeast winds at 9 mph with 16 mph wind gusts and an ambient air temperature of 80 degrees Fahrenheit.

Citizen 36-Incident No. 258283

Note: Prior to the investigation, the TCEQ R14 Complaint Coordinator contacted Citizen 36 to obtain the correct address. Samples of metallic particles collected on the garage door and the trampoline (heavily loaded) at Citizen 36's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 44-Incident No. 258226

Samples of metallic particles collected on the outdoor grill and electric box in the backyard at Citizen 44's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 60-Incident No. 258415

Samples of metallic particles collected on a front window sill of Citizen 60's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 61-Incident No. 258282

Samples of metallic particles collected on a front window sill of Citizen 61's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 62-Incident No. 258199

Samples of metallic particles collected on a front window sill of Citizen 62's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 63-Incident No. 258413

Samples of metallic particles collected on a front window ledge of Citizen 63's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 64-Incident No. 258479

Samples of metallic particles collected on a front window ledge of Citizen 64's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 65-Incident No. 258480

Samples of metallic particles collected on a side window ledge and a front window screen framework of Citizen 65's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 66-Incident No. 258421

Samples of metallic particles collected on a front window sill of Citizen 66's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 67-Incident No. 258408

Samples of metallic particles collected on a back porch window sill of Citizen 67's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 68-Incident No. 258485

Samples of metallic particles collected on a front patio table and front window sill of Citizen 68's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 69-Incident No. 258405

Samples of metallic particles collected on the backyard air conditioning unit at Citizen 69's residence were

confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 70-Incident No. 258470

Samples of metallic particles collected on a trash can at Citizen 70's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 71-Incident No. 258472

Samples of metallic particles collected on a front window of Citizen 71's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 72-Incident No. 258471

Samples of metallic particles collected on a front window sill located by the front door of Citizen 72's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 73-Incident No. 258473

Samples of metallic particles collected on a front window sill located by the front door of Citizen 73's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 74-Incident No. 258484

Samples of metallic particles collected on a front window ledge of Citizen 74's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 75-Incident No. 258418

Samples of metallic particles collected on a front window sill of Citizen 75's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 76-Incident No. 258423

Samples of metallic particles collected on a front window sill of Citizen 76's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 77-Incident No. 258424

Samples of metallic particles collected on a front window sill of Citizen 77's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 78-Incident No. 258475

Samples of metallic particles collected on a front window sill of Citizen 78's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 79-Incident No. 258474

Samples of metallic particles collected on the top of a (attached) black box by front door of Citizen 79's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 80-Incident No. 258476

Samples of metallic particles collected on a front window sill of Citizen 80's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 81-Incident No. 258477

Samples of metallic particles collected on a front window sill of Citizen 81's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 82-Incident No. 258468

Samples of metallic particles collected on a front door panel of Citizen 82's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 83-Incident No. 258482

Samples of metallic particles collected on a front window sill of Citizen 83's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

May 24, 2017

Ms. Hoelscher and Ms. Bernhagen conducted an onsite investigation at Voestalpine to collect representative samples of the outdoor stockpiles for total metal analysis. At the time of the investigation, meteorological conditions consisted of north/northwest winds at 7 mph with 14 mph wind gusts and an ambient air temperature of 74 degrees Fahrenheit. Ms. Hoelscher and Ms. Bernhagen met with Ms. Parham and Mr. Hernandez and a brief process description was given prior to collecting samples. A total of 10 representative samples of the stockpiles were collected and designated as the following:

- (1) Lab Sample ID HS17051351-01 (01-Remet Pile);
- (2) Lab Sample ID HS17051351-02 (02-HBI Chips & Fines);
- (3) Lab Sample ID HS17051351-03 (03-Remet/Fines/Iron Oxide Pellets);
- (4) Lab Sample ID HS17051351-04 (04-HBI Fines);
- (5) Lab Sample ID HS17051351-05 (05-Remet & HBI Fines);
- (6) Lab Sample ID HS17051351-06 (06-Iron Oxide Fines);
- (7) Lab Sample ID HS17051351-07 (07-Coated Iron Oxide Pellets);
- (8) Lab Sample ID HS17051351-08 (08-Iron Oxide Pellets);
- (9) Lab Sample ID HS17051351-09 (09-HBI Fines Cold Briquettes); and
- (10) Lab Sample ID HS17051351-10 (010-HBI Fines).

The total metal lab results are given in Attachment 12, and photographs of the sampling locations are given in Attachment 13.

Two TCEQ teams responded, concurrently, to 17 complaints. Mr. Kiss and Mr. Haney (Team 1) responded to 11 complaints (Citizen 84-94), and Mr. Lindsay and Mr. Burke (Team 2) responded to six complaints (Citizen 95-100). Note: Citizen 35 was unaware that a TCEQ Team had spoken to Citizen 35's spouse on May 19, 2017 and had confirmed the metallic particles at Citizen 35's residence had magnetic properties; therefore, Team 1 also responded to Citizen 35's concerns on May 24, 2017. At the time of the investigation, meteorological conditions consisted of northwest winds at 6 mph with 14 mph wind gusts and an ambient air temperature of 82 degrees Fahrenheit.

Citizen 35-Incident No. 258264

Samples of metallic particles collected on a front window ledge of Citizen 35's residence were reconfirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences. See the May 19, 2017 section above for more information.

Citizen 84-Incident No. 258557

Samples of metallic particles collected on a window ledge of Citizen 84's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 85-Incident No. 258590

Samples of metallic particles collected on window screen framework of Citizen 85's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 86-Incident No. 258595

Samples of metallic particles collected on a window sill of Citizen 86's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 87-Incident No. 258589

Samples of metallic particles collected on a window screen framework of Citizen 87's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 88-Incident No. 258596

Samples of metallic particles collected on a window sill of Citizen 88's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 89-Incident No. 258591

Samples of metallic particles collected on a window sill of Citizen 89's residence were confirmed to have magnetic

properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 90-Incident No. 258546

Samples of metallic particles collected on a window sill of Citizen 90's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 91-Incident No. 258572

Samples of metallic particles collected on a window sill of Citizen 91's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 92-Incident No. 258599

Samples of metallic particles collected on window screen framework of Citizen 92's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 93-Incident No. 258554

Samples of metallic particles collected on window screen framework of Citizen 93's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 94-Incident No. 258581

Samples of metallic particles collected on a window ledge of Citizen 94's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 95-Incident No. 258553

Samples of metallic particles collected on a front window sill of Citizen 95's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 96-Incident No. 258565

Samples of metallic particles collected on an outdoor glass tabletop at Citizen 96's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 97-Incident No. 258646

Samples of metallic particles collected on a backyard window air condition unit of Citizen 97's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 98-Incident No. 258570

Samples of metallic particles collected on a window ledge of Citizen 98's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 99-Incident No. 258575

Samples of metallic particles collected on a window sill of Citizen 99's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 100-Incident No. 258580

Samples of metallic particles collected on a window ledge of Citizen 100's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

May 25, 2017

Mr. Haney and Mr. Rizzo responded to three complaints (Citizen 101-103) received at the TCEQ R14 Office. At the time of the investigation, meteorological conditions consisted of south winds at 16 mph with 25 mph wind gusts and an ambient air temperature of 81 degrees Fahrenheit.

Citizen 101-Incident No. 258626

Tape lift samples were obtained from an east facing window sill and a southeast facing window sill at Citizen 101's residence, designated as Sample No. 1706003-001 and 1706003-002, respectively. The Laboratory Analysis Results of the tape lift samples, Request No. 1706003, are given in Attachment 14. The results indicated the following:

Sample No. 1706003-001 (lightly loaded) contained less than 5% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 30 to 50 microns. The sample also contained between 71 and 80% plant material and between 5 and 20% common clays and minerals. Other particles present in quantities less than 5% included fungal spores, paint chips, and plant fibers. The x-ray spectra of a metal particle was consistent with the reference samples submitted in Request No. 1705011.

Sample No. 1706003-002 (lightly loaded) contained between 21 and 30% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 1 to 100 microns. The sample also contained between 51 and 60% common clays and minerals and between 5 and 20% plant material. Other particles present in quantities less than 5% included fungal spores and plant fibers. The x-ray spectra of a metal particle was consistent with the reference samples submitted in Request No. 1705011.

Citizen 102-Incident No. 258648

Samples of metallic particles collected on a window sill of Citizen 102's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 103-Incident No. 258660

Samples of metallic particles collected on a window ledge of Citizen 103's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

May 26, 2017

Mr. Lindsay and Ms. Sparks responded to seven complaints (Citizen 104-110) received at the TCEQ R14 Office. At the time of the investigation, meteorological conditions consisted of southeast winds at 17 mph with 29 mph wind gusts and an ambient air temperature of 84 degrees Fahrenheit.

Citizen 104-Incident No. 258996

Samples of metallic particles collected on a window ledge of Citizen 104's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 105-Incident No. 258669

Samples of metallic particles collected on a window ledge of Citizen 105's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 106-Incident No. 258763

Samples of metallic particles collected on a window sill of Citizen 106's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 107-Incident No. 258992

Samples of metallic particles collected on a front window ledge of Citizen 107's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 108-Incident No. 259001

Samples of metallic particles collected on a window sill of Citizen 108's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 109-Incident No. 258765

Samples of metallic particles collected on an electric meter cover at Citizen 109's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 110-Incident No. 258764

Samples of metallic particles collected on a window ledge of Citizen 110's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

May 30, 2017

Ms. Hoelscher and Ms. Bernhagen responded to five complaints (Citizen 111-115) received at the TCEQ R14 Office. At the time of the investigation, meteorological conditions consisted of southeast winds at 7 mph with 13 mph wind gusts and an ambient air temperature of 85 degrees Fahrenheit.

Citizen 111-Incident No. 258968

Samples of metallic particles collected on a back patio table and front window screen framework of Citizen 111's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences. It also appeared that metallic particles had settled on the bottom of the pool. Note: Prior to the TCEQ Team arriving at the residence, Citizen 111 had collected some of the metallic particles from the pool. Citizen 111 demonstrated to the TCEQ Team that the metallic particles had magnetic properties consistent with the metallic particles identified at Citizen 111's residence and on the other citizens' residences.

Citizen 112-Incident No. 258969

Samples of metallic particles collected on a front window ledge and sill and the air conditioner unit cover at Citizen 112's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 113-Incident No. 258990

Samples of metallic particles collected on a front window sill and the garage door seal of Citizen 113's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 114-Incident No. 259004

Samples of metallic particles collected on a front window screen framework of Citizen 114's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 115-Incident No. 259029

Tape lift samples were obtained from the floor board inside a car and the outdoor garage light bulb at Citizen 115's residence, designated as Sample No. 1706004-001 and 1706004-002, respectively. The Laboratory Analysis Results of the tape lift samples, Request No. 1706004, are given in Attachment 15. The results indicated the following:

Sample No. 1706004-001 (moderately loaded) contained less than 5% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 5 to 100 microns. Paint chips accounted from over 80% of the particles coverage. The sample also contained between 5 and 20% hair. Other particles present in quantities less than 5% included common clays and minerals and paper fibers. The x-ray spectra of a metal particle was consistent with the reference samples submitted in Request No. 1705011.

Sample No. 1706004-002 (heavily loaded) contained between 5 and 20% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 1 to 80 microns. The sample also contained between 5 and 20% common clays and minerals and between 61 and 70% fungal spores. Other particles present in quantities less than 5% included paint overspray, paper fibers, plant trichomes, and pollen. The x-ray spectra of a metal particle was consistent with the reference samples submitted in Request No. 1705011.

June 2, 2017

Ms. Hoelscher and Ms. Smith responded to three complaints (Citizen 116-118) received at the TCEQ R14 Office. At the time of the investigation, meteorological conditions consisted of east winds at 7 mph with 13 mph wind gusts and an ambient air temperature of 84 degrees Fahrenheit.

Citizen 116-Incident No. 259152

Samples of metallic particles collected on a front window ledge at Citizen 116's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 117-Incident No. 259150

Samples of metallic particles collected on a front window ledge at Citizen 117's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 118-Incident No. 259692

Samples of metallic particles collected on a front window ledge at Citizen 118's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

June 5, 2017

Ms. Hoelscher and Ms. Fuqua responded to two complaints (Citizen 119-120) received at the TCEQ R14 Office. At the time of the investigation, meteorological conditions consisted of north/northwest winds at 5 mph with 11 mph wind gusts and an ambient air temperature of 84 degrees Fahrenheit.

Citizen 119-Incident No. 259693

Samples of metallic particles collected on a front window ledge at Citizen 119's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 120-Incident No. 259694

Samples of metallic particles collected on a back window sill and ledge and inside of the backyard pool at Citizen 120's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences. It was noted that the metallic particles had settled on the bottom of the pool and pool steps, and Citizen 120 demonstrated to the TCEQ Team that the metallic particles had magnetic properties consistent with the metallic particles identified at Citizen 120's residence and on the other citizens' residences. Citizen 120 also stated that the pool is cleaned daily with an automatic device. Citizen 120 contacted the TCEQ R14 Office on June 7, 2017 indicating that the pool had been cleaned the previous afternoon (June 6, 2017) and that morning (June 7, 2017) there were more metallic particles in the pool.

June 8, 2017

Ms. Hoelscher and Mr. Haney responded to four complaints (Citizen 121-124) received at the TCEQ R14 Office. At the time of the investigation, meteorological conditions consisted of south/southeast winds at 7 mph with 14 mph wind gusts and an ambient air temperature of 86 degrees Fahrenheit.

Citizen 121-Incident No. 259695

Samples of metallic particles collected on the front window sills at Citizen 121's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 122-Incident No. 259742

Samples of metallic particles collected on a front window sill at Citizen 122's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 123-Incident No. 259752

Samples of metallic particles collected on a front window sill at Citizen 123's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 124-Incident No. 259825

Samples of metallic particles collected on a side window sill at Citizen 124's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

June 13, 2017

Ms. Hoelscher and Ms. Fuqua responded to four complaints (Citizen 125-128) received at the TCEQ R14 Office. At the time of the investigation, meteorological conditions consisted of southeast winds at 13 mph with 22 mph wind gusts and an ambient air temperature of 86 degrees Fahrenheit.

Citizen 125-Incident No. 259842

Samples of metallic particles collected on the front window sill at Citizen 125's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 126-Incident No. 260218

Samples of metallic particles collected on a front window ledge at Citizen 126's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 127-Incident No. 260219

Samples of metallic particles collected on a front window sill and front patio railing at Citizen 127's residence were

confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 128-Incident No. 260216

Samples of metallic particles collected on a front window sill and an outlet box by the front door at Citizen 128's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

June 15, 2017

Ms. Hoelscher and Ms. Fox responded to two complaints (Citizen 129-130) received at the TCEQ R14 Office. At the time of the investigation, meteorological conditions consisted of southeast winds at 14 mph with 23 mph wind gusts and an ambient air temperature of 86 degrees Fahrenheit.

Citizen 129-Incident No. 260253

Samples of metallic particles collected on a front window ledge at Citizen 129's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 130-Incident No. 260266

Samples of metallic particles collected on a front window ledge at Citizen 130's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

June 23, 2017

Ms. Hoelscher responded to five complaints (Citizen 131-135) received at the TCEQ R14 Office. At the time of the investigation, meteorological conditions consisted of south winds at 13 mph with 21 mph wind gusts and an ambient air temperature of 86 degrees Fahrenheit.

Citizen 131-Incident No. 260419

Samples of metallic particles collected on a front window screen frame at Citizen 131's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 132-Incident No. 260561

Samples of metallic particles collected on the outlet box by the front door at Citizen 132's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 133-Incident No. 260562

Samples of metallic particles collected on a back window ledge at Citizen 133's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

In addition, a 30-second ambient air tape lift sample was obtained in the backyard of Citizen 133's property, designated as Sample No. 1707002-001. It should be noted that Citizen 133's backyard bordered an open field directly downwind of Voestalpine. The Laboratory Analysis Results of the tape lift sample, Request No. 1707002, are given in Attachment 16. The results indicated the following:

Sample No. 1707002-001 (lightly loaded) contained between 31 and 40% metal particles. The metal particles ranged in size from 15 to 40 microns. The sample also contained between 31 and 40% plant fibers and between 5 and 20% common clays and minerals. Other particles present in quantities less than 5% included fungal spores. There were two metal particles and one plant fiber that made for the majority of the particles on the subsample. There was not enough sample to confirm, by EDS, if the metal particles were consistent with reference samples in Request No. 1705011.

Citizen 134-Incident No. 260594

Samples of metallic particles collected on a back window ledge at Citizen 134's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 135-Incident No. 260903

Samples of metallic particles collected on a front window ledge at Citizen 135's residence were confirmed to have

magnetic properties consistent with the metallic particles identified on the other citizens' residences. It also appeared that metal particles had settled on the bottom of the children's pool on the front porch.

June 30, 2017

Ms. Hoelscher responded to two complaints (Citizen 136-137) received at the TCEQ R14 Office. At the time of the investigation, meteorological conditions consisted of south/southeast winds at 14 mph with 22 mph wind gusts and an ambient air temperature of 86 degrees Fahrenheit.

Citizen 136-Incident No. 261418

Samples of metallic particles collected on a front window sill at Citizen 136's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Citizen 137-Incident No. 261445

Samples of metallic particles collected on a front window sill at Citizen 137's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences. It also appeared that metal particles had settled on the bottom of the backyard pool.

July 13, 2017

Ms. Hoelscher responded to one complaint (Citizen 138) received at the TCEQ R14 Office. At the time of the investigation, meteorological conditions consisted of southeast winds at 11 mph with 19 mph wind gusts and an ambient air temperature of 88 degrees Fahrenheit.

Citizen 138-Incident No. 262147

Samples of metallic particles collected on two side window sills and the front door at Citizen 138's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences. It should be noted that Citizen 138 had washed the front door off with water within the prior week and an accumulation of metal particles was still documented on the front door.

Ms. Hoelscher also conducted an onsite investigation at Voestalpine to document the progress of corrective actions. At the time of the investigation, meteorological conditions consisted of southeast winds at 11 mph with 19 mph wind gusts and an ambient air temperature of 89 degrees Fahrenheit. Ms. Hoelscher met with Ms. Parham and Mr. Vanlandingham to discuss the current conditions of the outdoor stockpiles. A chemical suppressant, CHEMTREAT DT907 (Gorilla Snot), was being applied to the stockpiles to control dust. Refer to Attachment 17 for the SDS for Gorilla Snot. Dust suppression misting cannons, Dust Bosses, had also been purchased and were being utilized when there was any loading or unloading of the piles. See Attachment 17 for the dust boss spec sheet. The progression of removal or mitigation of emissions of the outdoor piles was documented and photographed per Emission Point No. (EPN). During the investigation, visible emissions were not noted leaving the piles or property. Refer to Attachment 18 for photographs of the piles.

July 19, 2017

Ms. Hoelscher and Ms. Diguardi responded to one complaint (Citizen 139) received at the TCEQ R14 Office. At the time of the investigation, meteorological conditions consisted of southeast winds at 11 mph with 19 mph wind gusts and an ambient air temperature of 89 degrees Fahrenheit.

Citizen 139-Incident No. 263318

Samples of metallic particles collected on the hurricane shutters on a side backyard window at Citizen 139's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

September 8, 2017

Ms. Hoelscher and Mr. Kiss responded to one complaint (Citizen 140) received at the TCEQ R14 Office. At the time of the investigation, meteorological conditions consisted of east winds at 11 mph with 20 mph wind gusts and an ambient air temperature of 84 degrees Fahrenheit.

Citizen 140-Incident No. 267252

Samples of metallic particles collected on a front window ledge at Citizen 140's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

October 16, 2017

Ms. Hoelscher and Mr. Pinion responded to one complaint (Citizen 141) received at the TCEQ R14 Office. At the time of the investigation, meteorological conditions consisted of north winds at 20 mph with 27 mph wind gusts and an ambient air temperature of 75 degrees Fahrenheit.

Citizen 141-Incident No. 270289

Samples of metallic particles collected on a front window sill at Citizen 141's residence were confirmed to have magnetic properties consistent with the metallic particles identified on the other citizens' residences.

Additional Information

Additional information regarding Voestalpine's operations was requested on May 31, 2017 and June 16, 2017. A response was received on June 14, 2017 and June 21, 2017, respectively. See Attachment 19 for the additional information.

EXIT INTERVIEW:

On July 20, 2017, an Exit Interview Form (EIF) outlining three alleged violations was sent to Ms. Parham and Mr. Hernandez via email. Ms. Parham responded with some additional questions, and Ms. Hoelscher provided a response on July 27, 2017. As requested by Voestalpine, an EIF meeting was conducted on August 10, 2017 with the following attendees: Ms. Parham, Mr. Schwarz, Mr. Chernenkoff, Ms. Pringle, Mr. Robinson, Mr. Ruble, Mr. Lopez, Ms. Clewis, and Ms. Hoelscher. Refer to Attachment 20 for the Exit Interview documentation.

On September 22, 2017, Ms. Parham submitted additional information in response to the alleged violations. The EIF response is referenced in Attachment 21 and is located in the TCEQ R14 Office confidential files.

II. GENERAL FACILITY AND PROCESS INFORMATION

PROCESS DESCRIPTION:

Voestalpine is a Direct Reduced Iron (DRI)/Hot Briquetting Iron (HBI) production plant. Voestalpine receives iron oxide pellets which are converted to iron pellets and then pressed into iron briquettes. The DRI process consists of two main components including a reformer, to produce the reducing agent, and the DRI reactor, where the reaction occurs. For a complete process description see Voestalpine's public files at the TCEQ R14 Office.

III. BACKGROUND

PERFORMANCE CLASSIFICATION AND COMPLIANCE RATING:

Voestalpine Texas LLC (CN604261545)

Classification: High

Rating: 0.00

La Quinta Plant (RN106597875)

Classification: High

Rating: 0.00

NOTE: Title 30 TAC §60.2 - Compliance History Classification (Point Ranges):

High Performer (above-satisfactory compliance record) = fewer than 0.10 points;

Satisfactory Performer (generally complies with environmental regulations) = 0.10 to 55 points;

Unsatisfactory Performer (performs below minimal acceptable performance standards established by the commission) = more than 55 points

AGREED ORDERS, COURT ORDERS, AND OTHER COMPLIANCE AGREEMENTS:

Voestalpine has not been subject to any air-related agreed orders, court orders, or other compliance agreements in the past five years.

PRIOR ENFORCEMENT ISSUES:

Voestalpine has not been the subject of any prior air-related enforcement issues in the past five years.

COMPLAINTS:

Prior to this investigation, Voestalpine had not been the subject of any air-related complaints. However, in the previous six months, Voestalpine has been the subject of 141 air-related complaints. These 141 complaints are addressed in this investigation.

IV. ADDITIONAL INFORMATION

CONCLUSIONS, RECOMMENDATIONS, AND CURRENT ENFORCEMENT ISSUES:

As a result of the complaint investigations conducted on May 16, 2017, May 17, 2017, May 18, 2017, May 19, 2017, May 20, 2017, May 23, 2017, May 24, 2017, May 25, 2017, May 26, 2017, May 30, 2017, June 2, 2017, June 5, 2017, June 8, 2017, June 13, 2017, June 15, 2017, June 23, 2017, June 30, 2017, July 13, 2017, July 19, 2017, September 8, 2017, and October 16, 2017, by the TCEQ's onsite observations, analyses of samples collected, review of CCE, and review of the additional information submitted by Voestalpine, the following noncompliant issues were documented.

Voestalpine failed to prevent nuisance dust conditions. Deposits of particulate matter (iron ore dust) from the La Quinta Plant were found in sufficient concentration and of such duration to interfere with normal use and enjoyment of property (nuisance dust conditions). A variance request was approved by Ms. Clewis on August 16, 2017 to initiate formal enforcement against Voestalpine due to the high number of citizens in the Portland community impacted by the metallic particles (iron ore dust). The citizens have been unable to have normal use and enjoyment of their property due to the accumulation of the iron ore dust on and in their residences, in their pools, in their yards, on their children's outdoor play equipment, and on their vehicles. Refer to Violation Track No. 651644 for more information.

As per Voestalpine's New Source Review (NSR) Permit No. 108113 Special Condition 17, iron ore pellets shall be stored in enclosed storage. Voestalpine failed to comply with NSR Permit No. 108113 and began storing iron ore pellets outside at the La Quinta Plant on February 17, 2017. The outside storage of iron ore pellets was verified during onsite sampling events on May 17, 2017 and May 24, 2017. As of June 6, 2017, Voestalpine had five outside storage piles containing iron ore pellets, EPNs 45, 46, 56, 59, 60. Refer to Violation Track No. 651649 for more information.

In addition, Voestalpine failed to obtain authorization for outside storage of piles of fines, clusters, chips, sludge, and remet. On June 6, 2017, Voestalpine submitted a notification for a permit by rule (PBR) registration, Title 30 Texas Administrative Code (TAC) §106.261, to authorize emissions for the outdoor storage piles. There were 20 unauthorized storage piles, EPNs 41 through 61, of iron ore pellets, fines, chips, sludge, and remet. The amount stored in each pile ranged from approximately 35 metric tons to 95,000 metric tons. On July 6, 2017, the PBR Registration No. 147082 was issued to the La Quinta Plant certifying the emissions of the outdoor storage piles under 30 TAC §106.261. PBR Registration No. 147082 documentation is included in Attachment 22. Refer to Violation Track No. 651654 for more information.

See the "OUTSTANDING ALLEGED VIOLATION(S) ASSOCIATED TO A NOTICE OF ENFORCEMENT" section and the "ALLEGED VIOLATION(S) NOTED AND RESOLVED ASSOCIATED TO A NOTICE OF ENFORCEMENT" section below for details.

V. ATTACHMENTS

1. Complaint List
2. Photographic Documentation of Citizens' Impact of Metallic Particles
3. Laboratory Analysis Request No. 1705011
4. May 17, 2017 Reference Sample Photographs

5. Process Description and Safety Data Sheets
6. Voestalpine Texas Site Dust Health Risk Analysis
7. Laboratory Analysis Request No. 1705012
8. Laboratory Analysis Request No. 1705014
9. Laboratory Analysis Request No. 1705013
10. Laboratory Analysis Request No. 1705016
11. Citizen Collected Evidence
12. TCEQ Heavy Metal Sample Results
13. May 24, 2017 Heavy Metal Sampling Photographs
14. Laboratory Analysis Request No. 1706003
15. Laboratory Analysis Request No. 1706004
16. Laboratory Analysis Request No. 1707002
17. Gorilla Snot Safety Data Sheet and Dust Boss Spec Sheet
18. July 13, 2017 Photographs
19. Additional Information
20. Exit Interview Documentation
21. Exit Interview Form Response
22. Permit by Rule Registration No. 147082 Documentation

NOE Date: 11/3/2017

**OUTSTANDING ALLEGED VIOLATION(S)
ASSOCIATED TO A NOTICE OF ENFORCEMENT**

Track Number: 651644

Compliance Due Date: To Be Determined

Violation Start Date: Unknown

30 TAC Chapter 101.4
5C THSC Chapter 382.085(b)

Alleged Violation:

Investigation: 1415945

Comment Date: 11/02/2017

Failure to prevent nuisance dust conditions. Specifically, Voestalpine Texas LLC failed to prevent a discharge from any source whatsoever one or more air contaminants or combinations thereof, in such concentration and of such duration as are or may tend to be injurious to or to adversely affect human health or welfare, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property. Based upon a response to 141 citizen complaints received on May 16, 2017, May 17, 2017, May 18, 2017, May 19, 2017, May 20, 2017, May 21, 2017, May 22, 2017, May 23, 2017, May 24, 2017, May 25, 2017, May 26, 2017, May 30, 2017, May 31, 2017, June 2, 2017, June 5, 2017, June 7, 2017, June 8, 2017, June 12, 2017, June 13, 2017, June 14, 2017, June 16, 2017, June 19, 2017, June 20, 2017, June 22, 2017, June 27, 2017, June 30, 2017, July 18, 2017, August 24, 2017, and October 13, 2017, by the TCEQ's onsite observations, analyses of samples collected, and review of citizen collected evidence, it was determined that deposits of particulate matter (iron ore dust) from the La Quinta Plant were found in sufficient concentration and of such duration to interfere with normal use and enjoyment of property. Nuisance dust conditions were documented on May 16, 2017, May 17, 2017, May 18, 2017, May 19, 2017, May 20, 2017, May 23, 2017, May 24, 2017, May 25, 2017, May 26, 2017, May 30, 2017, June 2, 2017, June 5, 2017, June 8, 2017, June 13, 2017, June 15, 2017, June 23, 2017, June 30, 2017, July 13, 2017, July 19, 2017, September 8, 2017, and October 16, 2017.

Recommended Corrective Action: Submit to the TCEQ Corpus Christi Office written corrective actions implemented to prevent a similar noncompliance in the future. Furthermore, comply with any requirement(s) that the TCEQ Enforcement Division specifies.

**ALLEGED VIOLATION(S) NOTED AND RESOLVED
ASSOCIATED TO A NOTICE OF ENFORCEMENT**

Track Number: 651649

Resolution Status Date: 9/26/2017

Violation Start Date: 2/17/2017

Violation End Date: 7/6/2017

30 TAC Chapter 101.20(3)
30 TAC Chapter 116.115(c)
5C THSC Chapter 382.085(b)

PERMIT 108113, PSDTX1344M1, Special Condition 17

Iron ore pellets shall be stored in enclosed storage.

Alleged Violation:

Investigation: 1415945

Comment Date: 09/26/2017

Failure to store iron ore pellets in enclosed storage. Specifically, Voestalpine Texas LLC began storing iron ore pellets outside at the La Quinta Plant on February 17, 2017. The outside storage of iron ore pellets was verified during onsite sampling events on May 17, 2017 and May 24, 2017. As of June 6, 2017, Voestalpine Texas LLC had five outside storage piles containing iron ore pellets, Emission Point Numbers (EPNs) 45, 46, 56, 59, 60.

Recommended Corrective Action: Submit to the TCEQ Corpus Christi Office written corrective actions implemented to prevent a similar noncompliance in the future. Furthermore, comply with any requirement(s) that the TCEQ Enforcement Division specifies.

Resolution: On June 6, 2017, Voestalpine Texas LLC submitted a notification for a permit by rule (PBR) registration, Title 30 Texas Administrative Code (TAC) §106.261, to authorize emissions for the outdoor storage piles. There were 20 unauthorized storage piles, Emission Point Numbers (EPNs) 41-61, of iron ore pellets, fines, chips, sludge, and remet. On July 6, 2017, the PBR Registration No. 147082 was issued to the La Quinta Plant certifying the emissions of the outdoor storage piles under 30 TAC §106.261.

Track Number: 651654

Resolution Status Date: 8/17/2017

Violation Start Date: 2/17/2017

Violation End Date: 7/6/2017

30 TAC Chapter 116.110(a)
5C THSC Chapter 382.085(b)

Alleged Violation:

Investigation: 1415945

Comment Date: 08/17/2017

Failure to obtain proper authorization. Specifically, Voestalpine Texas LLC began storing iron ore pellets outside on February 17, 2017 and continued to store additional piles of fines, clusters, chips, sludge, and remet, EPNs 41 through 61, without obtaining authorization.

Recommended Corrective Action: Submit to the TCEQ Corpus Christi Office written corrective actions implemented to prevent a similar noncompliance in the future. Furthermore, comply with any requirement(s) that the TCEQ Enforcement Division specifies.

Resolution: On June 6, 2017, Voestalpine Texas LLC submitted a notification for a permit by rule (PBR) registration, Title 30 Texas Administrative Code (TAC) §106.261, to authorize emissions for the outdoor storage piles. There were 20 unauthorized storage piles, Emission Point Numbers (EPNs) 41-61, of iron ore pellets, fines, chips, sludge, and remet. On July 6, 2017, the PBR Registration No. 147082 was issued to the La Quinta Plant certifying the emissions of the outdoor storage piles under 30 TAC §106.261.

Signed Susan Hoelscher
Environmental Investigator

Date 11/2/17

Signed Kelly Ruble
Supervisor

Date 11/3/17

Attachments: (in order of final report submittal)

Enforcement Action Request (EAR)

Maps, Plans, Sketches

Letter to Facility (specify type) : Notice of Enforcement
(NOE)

Photographs

Investigation Report

Correspondence from the facility

Sample Analysis Results

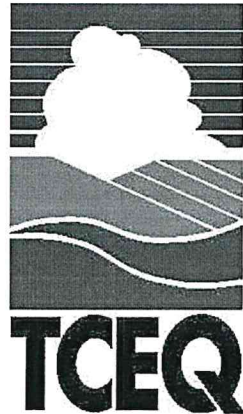
Other (specify) :

Manifests

See Attachment List on

Notice of Registration

Page 26 of 29 & Page 27 of 29 dk



ATTACHMENT 1
Complaint List

Total Pages: 4

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 - September 8, 2017

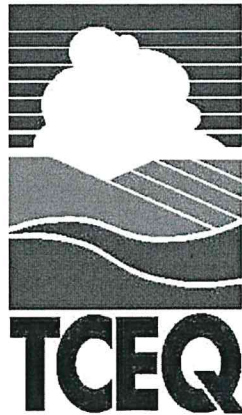
Voestalpine Complaint Log

<u>Citizen No.</u>	<u>Incident No.</u>	<u>Date Received</u>	<u>Investigation Date</u>	<u>Investigation No.</u>
1	257967	5/16/2017	5/16/2017	1415945
2	258031	5/16/2017	5/16/2017	1415945
3	258027	5/16/2017	5/16/2017	1415945
4	258034	5/16/2017	5/16/2017	1415945
5	258023	5/17/2017	5/17/2017	1415945
6	258012	5/17/2017	5/17/2017	1415945
7	258039	5/17/2017	5/17/2017	1415945
8	258158	5/18/2017	5/18/2017	1415945
9	258143	5/18/2017	5/18/2017	1415945
10	258147	5/18/2017	5/18/2017	1415945
11	258160	5/18/2017	5/18/2017	1415945
12	258146	5/18/2017	5/18/2017	1415945
13	258172	5/18/2017	5/18/2017	1415945
14	258138	5/18/2017	5/18/2017	1415945
15	258149	5/18/2017	5/18/2017	1415945
16	258170	5/18/2017	5/18/2017	1415945
17	258140	5/18/2017	5/18/2017	1415945
18	258165	5/18/2017	5/18/2017	1415945
19	258141	5/18/2017	5/18/2017	1415945
20	258144	5/18/2017	5/19/2017	1415945
21	258162	5/18/2017	5/19/2017	1415945
22	258169	5/18/2017	5/19/2017	1415945
23	258176	5/18/2017	5/20/2017	1415945
24	258201	5/18/2017	5/19/2017	1415945
25	258243	5/19/2017	5/19/2017	1415945
26	258245	5/19/2017	5/19/2017	1415945
27	258251	5/19/2017	5/19/2017	1415945
28	258235	5/19/2017	5/19/2017	1415945
29	258250	5/19/2017	5/19/2017	1415945
30	258238	5/19/2017	5/19/2017	1415945
31	258232	5/19/2017	5/19/2017	1415945
32	258248	5/19/2017	5/19/2017	1415945
33	258242	5/19/2017	5/19/2017	1415945
34	258244	5/19/2017	5/19/2017	1415945
35	258264	5/19/2017	5/19/2017	1415945
36	258283	5/19/2017	5/23/2017	1415945
37	258285	5/19/2017	5/19/2017	1415945
38	258166	5/18/2017	5/19/2017	1415945
39	258173	5/18/2017	5/19/2017	1415945
40	258202	5/19/2017	5/19/2017	1415945
41	258174	5/18/2017	5/19/2017	1415945
42	258177	5/18/2017	5/19/2017	1415945

43	258229	5/19/2017	5/19/2017	1415945
44	258226	5/19/2017	5/23/2017	1415945
45	258230	5/19/2017	5/19/2017	1415945
46	258263	5/19/2017	5/19/2017	1415945
47	258142	5/18/2017	5/19/2017	1415945
48	258156	5/18/2017	5/19/2017	1415945
49	258150	5/18/2017	5/19/2017	1415945
50	258171	5/18/2017	5/19/2017	1415945
51	258227	5/19/2017	5/19/2017	1430244
52	258167	5/18/2017	5/19/2017	1430244
53	258200	5/18/2017	5/19/2017	1430244
54	258203	5/19/2017	5/19/2017	1430244
55	258223	5/19/2017	5/19/2017	1430244
56	258420	5/19/2017	5/20/2017	1430244
57	258308	5/19/2017	5/20/2017	1430244
58	258309	5/19/2017	5/20/2017	1430244
59	258287	5/19/2017	5/20/2017	1430244
60	258415	5/20/2017	5/23/2017	1430244
61	258282	5/19/2017	5/23/2017	1430244
62	258199	5/18/2017	5/23/2017	1430244
63	258413	5/20/2017	5/23/2017	1430244
64	258479	5/22/2017	5/23/2017	1430244
65	258480	5/23/2017	5/23/2017	1430244
66	258421	5/22/2017	5/23/2017	1430244
67	258408	5/19/2017	5/23/2017	1430244
68	258485	5/23/2017	5/23/2017	1430244
69	258405	5/19/2017	5/23/2017	1430244
70	258470	5/22/2017	5/23/2017	1430244
71	258472	5/22/2017	5/23/2017	1430244
72	258471	5/22/2017	5/23/2017	1430244
73	258473	5/22/2017	5/23/2017	1430244
74	258484	5/23/2017	5/23/2017	1430244
75	258418	5/21/2017	5/23/2017	1430244
76	258423	5/22/2017	5/23/2017	1430244
77	258424	5/22/2017	5/23/2017	1430244
78	258475	5/22/2017	5/23/2017	1430244
79	258474	5/22/2017	5/23/2017	1430244
80	258476	5/22/2017	5/23/2017	1430244
81	258477	5/22/2017	5/23/2017	1430244
82	258468	5/22/2017	5/23/2017	1430244
83	258482	5/23/2017	5/23/2017	1430244
84	258557	5/23/2017	5/24/2017	1430244
85	258590	5/24/2017	5/24/2017	1430244
86	258595	5/24/2017	5/24/2017	1430244
87	258589	5/24/2017	5/24/2017	1430244
88	258596	5/24/2017	5/24/2017	1430244
89	258591	5/24/2017	5/24/2017	1430244

90	258546	5/23/2017	5/24/2017	1430244
91	258572	5/24/2017	5/24/2017	1430244
92	258599	5/24/2017	5/24/2017	1430244
93	258554	5/23/2017	5/24/2017	1430244
94	258581	5/24/2017	5/24/2017	1430244
95	258553	5/23/2017	5/24/2017	1430244
96	258565	5/24/2017	5/24/2017	1430244
97	258646	5/24/2017	5/24/2017	1430244
98	258570	5/24/2017	5/24/2017	1430244
99	258575	5/24/2017	5/24/2017	1430244
100	258580	5/24/2017	5/24/2017	1430244
101	258626	5/24/2017	5/25/2017	1430249
102	258648	5/24/2017	5/25/2017	1430249
103	258660	5/25/2017	5/25/2017	1430249
104	258996	5/26/2017	5/26/2017	1430249
105	258669	5/25/2017	5/26/2017	1430249
106	258763	5/25/2017	5/26/2017	1430249
107	258992	5/26/2017	5/26/2017	1430249
108	259001	5/26/2017	5/26/2017	1430249
109	258765	5/25/2017	5/26/2017	1430249
110	258764	5/25/2017	5/26/2017	1430249
111	258968	5/30/2017	5/30/2017	1430249
112	258969	5/30/2017	5/30/2017	1430249
113	258990	5/30/2017	5/30/2017	1430249
114	259004	5/30/2017	5/30/2017	1430249
115	259029	5/30/2017	5/30/2017	1430249
116	259152	5/31/2017	6/2/2017	1430249
117	259150	5/31/2017	6/2/2017	1430249
118	259692	6/2/2017	6/2/2017	1430249
119	259693	6/2/2017	6/5/2017	1430249
120	259694	6/5/2017	6/5/2017	1430249
121	259695	6/5/2017	6/8/2017	1430249
122	259742	6/7/2017	6/8/2017	1430249
123	259752	6/7/2017	6/8/2017	1430249
124	259825	6/8/2017	6/8/2017	1430249
125	259842	6/8/2017	6/13/2017	1430249
126	260218	6/12/2017	6/13/2017	1430249
127	260219	6/12/2017	6/13/2017	1430249
128	260216	6/12/2017	6/13/2017	1430249
129	260253	6/13/2017	6/15/2017	1430249
130	260266	6/14/2017	6/15/2017	1430249
131	260419	6/16/2017	6/23/2017	1430249
132	260561	6/19/2017	6/23/2017	1430249
133	260562	6/20/2017	6/23/2017	1430249
134	260594	6/20/2017	6/23/2017	1430249
135	260903	6/22/2017	6/23/2017	1430249
136	261418	6/27/2017	6/30/2017	1430249

137	261445	6/27/2017	6/30/2017	1430249
138	262147	6/30/2017	7/13/2017	1430249
139	263318	7/18/2017	7/19/2017	1430249
140	267252	8/24/2017	9/8/2017	1430249
141	270289	10/13/2017	10/16/2017	1430249



ATTACHMENT 2
**Photographic Documentation of Citizens' Impact of
Metallic Particles**

Total Pages: 57

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 – September 8, 2017



Subject: Demonstration of magnetic property
of the metallic particles on Citizen 1's
residence
Location: Citizen 1's Residence
TCEQ Incident No. 257967
City: Portland
County: San Patricio
Date: May 16, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 1



Subject: Location of Sample No. 1705011-001;
front siding of house
Location: Citizen 1's Residence
TCEQ Incident No. 257967
City: Portland
County: San Patricio
Date: May 16, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 2



Subject: Location of Sample No. 1705011-002;
front window glass
Location: Citizen 1's Residence
TCEQ Incident No. 257967
City: Portland
County: San Patricio
Date: May 16, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 3



Subject: Metallic particles on Citizen 1's residence
Location: Citizen 1's Residence
TCEQ Incident No. 257967
City: Portland
County: San Patricio
Date: May 16, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 4



Subject: Location of Sample No. 1705011-003;
outdoor light glass cover
Location: Citizen 2's Residence
TCEQ Incident No. 258031
City: Portland
County: San Patricio
Date: May 16, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 5



Subject: Location of Sample No. 1705011-004;
plastic storage box
Location: Citizen 2's Residence
TCEQ Incident No. 258031
City: Portland
County: San Patricio
Date: May 16, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 6



Subject: Location of Sample No. 1705011-005;
front door window sill
Location: Citizen 3's Residence
TCEQ Incident No. 258027
City: Portland
County: San Patricio
Date: May 16, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 7

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of Sample No. 1705011-006;
front window glass
Location: Citizen 3's Residence
TCEQ Incident No. 258027
City: Portland
County: San Patricio
Date: May 16, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 8



Subject: Location of Sample No. 1705011-007;
outdoor light glass cover
Location: Citizen 4's Residence
TCEQ Incident No. 258034
City: Portland
County: San Patricio
Date: May 16, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 9



Subject: Location of Sample No. 1705011-008;
front window glass
Location: Citizen 4's Residence
TCEQ Incident No. 258034
City: Portland
County: San Patricio
Date: May 16, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 10

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of Sample No. 1705012-001;
back door window glass
Location: Citizen 5's Residence
TCEQ Incident No. 258023
City: Portland
County: San Patricio
Date: May 17, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 11

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of Sample No. 1705012-002;
glass tabletop on back patio
Location: Citizen 5's Residence
TCEQ Incident No. 258023
City: Portland
County: San Patricio
Date: May 17, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 12

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of Sample No. 1705012-003;
glass tabletop on back deck
Location: Citizen 6's Residence
TCEQ Incident No. 258012
City: Portland
County: San Patricio
Date: May 17, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 13

Note: The time stamp on the photo is 1 hour ahead.



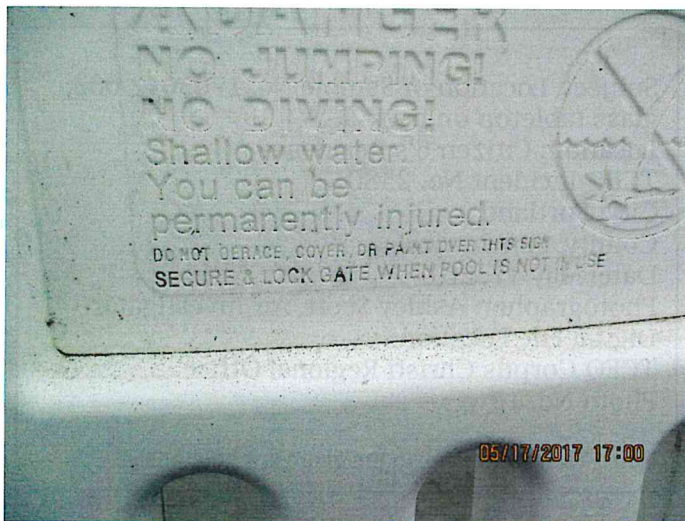
Subject: Location of Sample No. 1705012-004;
front window glass
Location: Citizen 6's Residence
TCEQ Incident No. 258012
City: Portland
County: San Patricio
Date: May 17, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 14

Note: The time stamp on the photo is 1 hour ahead.



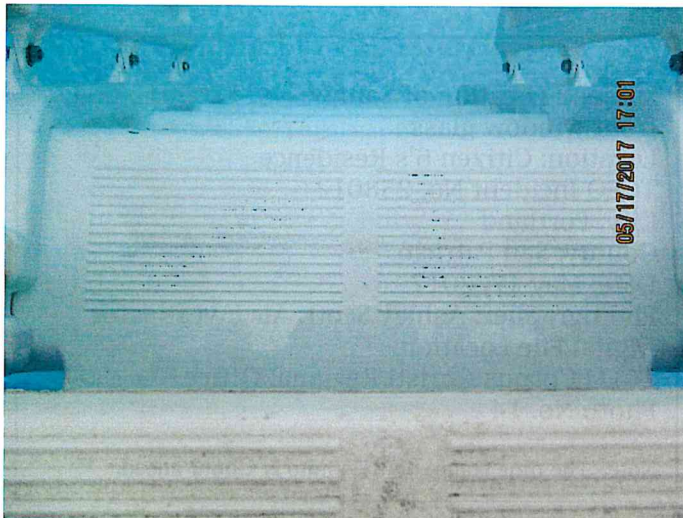
Subject: Metallic particles settled on the bottom
of Citizen 6's pool
Location: Citizen 6's Residence
TCEQ Incident No. 258012
City: Portland
County: San Patricio
Date: May 17, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 15

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of Sample No. 1705012-005;
backyard pool ladder
Location: Citizen 7's Residence
TCEQ Incident No. 258039
City: Portland
County: San Patricio
Date: May 17, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 16

Note: The time stamp on the photo is 1 hour ahead.



Subject: Metallic particles settled on the pool
ladder steps
Location: Citizen 7's Residence
TCEQ Incident No. 258039
City: Portland
County: San Patricio
Date: May 17, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 17

Note: The time stamp on the photo is 1 hour ahead.



Subject: Accumulation of metallic particles
settled on the bottom of the pool
Location: Citizen 7's Residence
TCEQ Incident No. 258039
City: Portland
County: San Patricio
Date: May 17, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 18

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of Sample No. 1705012-006;
front window glass
Location: Citizen 7's Residence
TCEQ Incident No. 258039
City: Portland
County: San Patricio
Date: May 17, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 19

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of Sample No. 1705014-006;
front window glass
Location: Citizen 8's Residence
TCEQ Incident No. 258158
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 20

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of Sample No. 1705014-007;
backyard pool ledge
Location: Citizen 8's Residence
TCEQ Incident No. 258158
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 21

Note: The time stamp on the photo is 1 hour ahead.



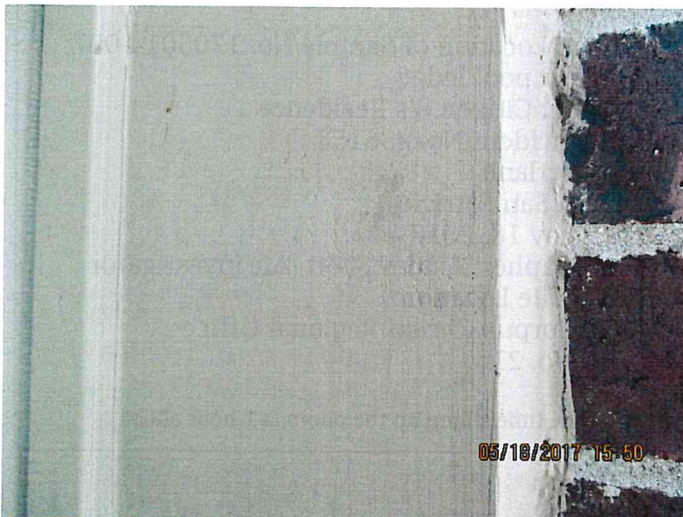
Subject: Accumulation of metallic particles settled on the bottom of the pool
Location: Citizen 8's Residence
TCEQ Incident No. 258158
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 22

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of Sample No. 1705013-007; front window glass
Location: Citizen 9's Residence
TCEQ Incident No. 258143
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 23

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of Sample No. 1705014-001; garage door siding
Location: Citizen 9's Residence
TCEQ Incident No. 258143
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 24

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of Sample No. 1705014-002;
front window glass
Location: Citizen 10's Residence
TCEQ Incident No. 258147
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 25

Note: The time stamp on the photo is 1 hour ahead.



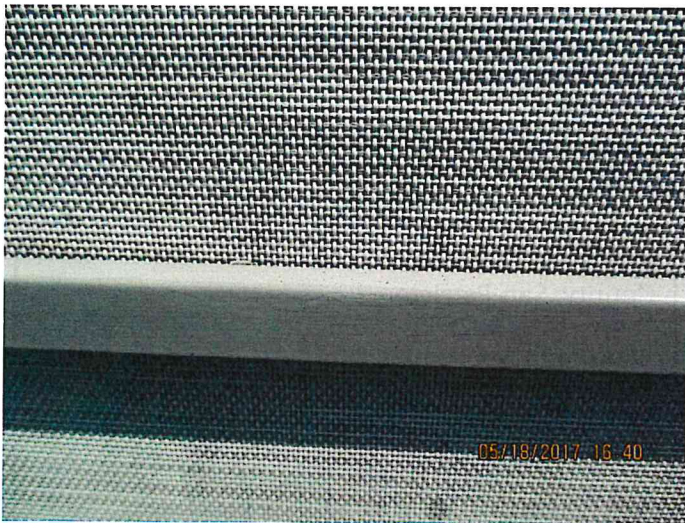
Subject: Location of Sample No. 1705014-003;
front door
Location: Citizen 10's Residence
TCEQ Incident No. 258147
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 26

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of Sample No. 1705014-004;
front door window glass
Location: Citizen 11's Residence
TCEQ Incident No. 258160
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 27

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of Sample No. 1705014-005;
front window screen frame
Location: Citizen 11's Residence
TCEQ Incident No. 258160
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 28

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of sample collection-back
window sill
Location: Citizen 12's Residence
TCEQ Incident No. 258146
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 29

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of Sample No. 1705013-001;
outside metal window sill
Location: Citizen 13's Workplace
TCEQ Incident No. 258172
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 30



Subject: Location of Sample No. 1705013-002;
outdoor light glass cover
Location: Citizen 14's Residence
TCEQ Incident No. 258138
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 31



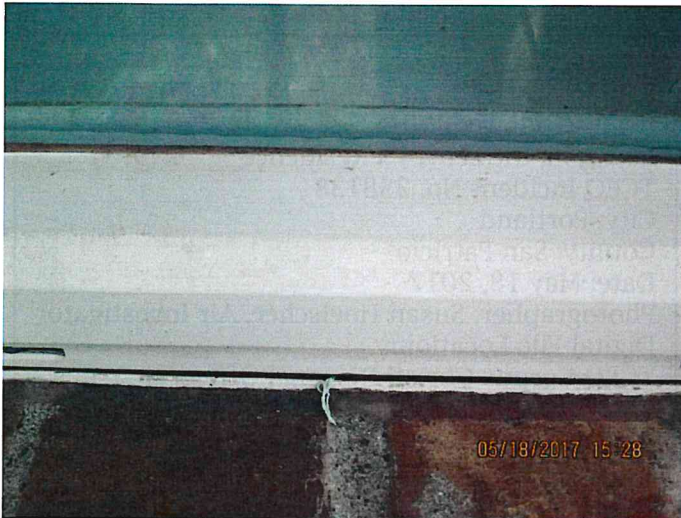
Subject: Location of Sample No. 1705013-003;
front window sill
Location: Citizen 14's Residence
TCEQ Incident No. 258138
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 32



Subject: Location of Sample No. 1705013-004;
trunk of a car
Location: Citizen 14's Residence
TCEQ Incident No. 258138
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 33



Subject: Location of sample collection-front window sill
Location: Citizen 15's Residence
TCEQ Incident No. 258149
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 34



Subject: Location of Sample No. 1705013-005; front window sill
Location: Citizen 16's Residence
TCEQ Incident No. 258170
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 35



Subject: Location of Sample No. 1705013-006; front door
Location: Citizen 16's Residence
TCEQ Incident No. 258170
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 36



Subject: Location of sample collection-BBQ pit located in backyard
Location: Citizen 17's Residence
TCEQ Incident No. 258140
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 37



Subject: Location of sample collection-piece of angle iron located in backyard
Location: Citizen 19's Residence
TCEQ Incident No. 258141
City: Portland
County: San Patricio
Date: May 18, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 38



Subject: Location of sample collection-front window sill
Location: Citizen 21's Residence
TCEQ Incident No. 258162
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Andrew Kiss, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 39



Subject: Location of sample collection-front window ledge
Location: Citizen 22's Residence
TCEQ Incident No. 258169
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 40



Subject: Sample collected from front window shutter
Location: Citizen 23's Residence
TCEQ Incident No. 258176
City: Portland
County: San Patricio
Date: May 20, 2017
Photographer: Kendra Bernhagen, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 41



Subject: Location of sample collection-front window ledge
Location: Citizen 24's Residence
TCEQ Incident No. 258201
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Andrew Kiss, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 42



Subject: Location of sample collection-front window sill
Location: Citizen 25's Residence
TCEQ Incident No. 258243
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Andrew Kiss, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 43



Subject: Location of sample collection-front window sill
Location: Citizen 26's Residence
TCEQ Incident No. 258245
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Andrew Kiss, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 44



Subject: Accumulation of metallic particles on the grass blades
Location: Citizen 26's Residence
TCEQ Incident No. 258245
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Andrew Kiss, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 45



Subject: Location of sample collection-front window glass
Location: Citizen 27's Residence
TCEQ Incident No. 258251
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Andrew Kiss, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 46



Subject: Location of Sample No. 1705016-003;
front window glass
Location: Citizen 28's Residence
TCEQ Incident No. 258235
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Andrew Kiss, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 47



Subject: Location of Sample No. 1705016-004;
outdoor light glass cover
Location: Citizen 28's Residence
TCEQ Incident No. 258235
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Andrew Kiss, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 48



Subject: Location of Sample No. 1705016-001;
front window glass
Location: Citizen 29's Residence
TCEQ Incident No. 258250
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Andrew Kiss, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 49



Subject: Location of Sample No. 1705016-002;
outdoor light plastic cover
Location: Citizen 29's Residence
TCEQ Incident No. 258250
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Andrew Kiss, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 50



Subject: Location of sample collection-front
window sill
Location: Citizen 31's Residence
TCEQ Incident No. 258232
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Andrew Kiss, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 51



Subject: Location of sample collection-front window screen framework
Location: Citizen 32's Residence
TCEQ Incident No. 258248
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Andrew Kiss, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 52



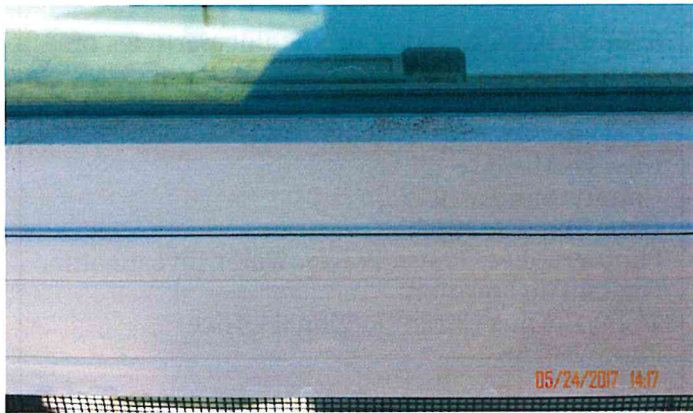
Subject: Location of sample collection-front window sill
Location: Citizen 33's Residence
TCEQ Incident No. 258242
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Andrew Kiss, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No.53



Subject: Location of sample collection-front window sill
Location: Citizen 34's Residence
TCEQ Incident No. 258244
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Andrew Kiss, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 54



Subject: Location of sample collection-front window ledge
Location: Citizen 35's Residence
TCEQ Incident No. 258264
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Andrew Kiss, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 55



Subject: Location of sample collection-front window ledge
Location: Citizen 35's Residence
TCEQ Incident No. 258264
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 56



Subject: Location of sample collection-garage door
Location: Citizen 36's Residence
TCEQ Incident No. 258283
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Travis Prater, Water Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 57

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of sample collection-
trampoline
Location: Citizen 36's Residence
TCEQ Incident No. 258283
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Travis Prater, Water Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 58

Note: The time stamp on the photo is 1 hour ahead.



Subject: Accumulation of metallic particles on
trampoline
Location: Citizen 36's Residence
TCEQ Incident No. 258283
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Travis Prater, Water Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 59

Note: The time stamp on the photo is 1 hour ahead.



Subject: Accumulation of metallic particles on
trampoline
Location: Citizen 36's Residence
TCEQ Incident No. 258283
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Travis Prater, Water Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 60

Note: The time stamp on the photo is 1 hour ahead.



Subject: Accumulation of metallic particles on trampoline
Location: Citizen 36's Residence
TCEQ Incident No. 258283
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Travis Prater, Water Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 61

Note: The time stamp on the photo is 1 hour ahead.



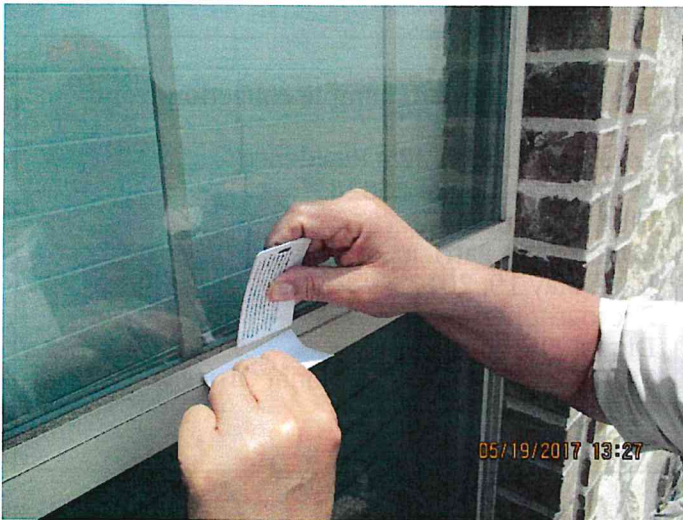
Subject: Location of sample collection-front window sill
Location: Citizen 37's Residence
TCEQ Incident No. 258285
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Andrew Kiss, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 62



Subject: Location of sample collection-glass window pane on side of residence
Location: Citizen 38's Residence
TCEQ Incident No. 258166
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Cindy Smith, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 63



Subject: Location of sample collection-BBQ pit
Location: Citizen 40's Residence
TCEQ Incident No. 258202
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Cindy Smith, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 64



Subject: Location of sample collection-front
window ledge
Location: Citizen 41's Residence
TCEQ Incident No. 258174
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Cindy Smith, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 65



Subject: Location of sample collection-front
window ledge
Location: Citizen 42's Residence
TCEQ Incident No. 258177
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Cindy Smith, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 66



Subject: Location of sample collection-front window ledge
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Cindy Smith, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 67



Subject: Location of sample collection-outdoor grill
Location: Citizen 44's Residence
TCEQ Incident No. 258226
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Travis Prater, Water Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 68

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of sample collection-electric box
Location: Citizen 44's Residence
TCEQ Incident No. 258226
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Travis Prater, Water Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 69

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of sample collection-BBQ grill
Location: Citizen 45's Residence
TCEQ Incident No. 258230
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Cindy Smith, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 70



Subject: Magnetic property of metallic particles accumulation on vehicle
Location: Citizen 46's Residence
TCEQ Incident No. 258263
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Mike Riff, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 71



Subject: Location of sample collection-patio table
Location: Citizen 47's Residence
TCEQ Incident No. 258142
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 72

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of sample collection-window ledge
Location: Citizen 49's Residence
TCEQ Incident No. 258150
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 73

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of sample collection-window ledge
Location: Citizen 50's Residence
TCEQ Incident No. 258171
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 74

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of sample collection-window sill
Location: Citizen 51's Residence
TCEQ Incident No. 258227
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 75

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of sample collection-window ledge
Location: Citizen 51's Residence
TCEQ Incident No. 258227
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 76

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of sample collection-garage door
Location: Citizen 51's Residence
TCEQ Incident No. 258227
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 77

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of sample collection-junction box
Location: Citizen 52's Residence
TCEQ Incident No. 258167
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 78

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of sample collection-window
screen framework
Location: Citizen 52's Residence
TCEQ Incident No. 258167
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 79

Note: The time stamp on the photo is 1 hour ahead.



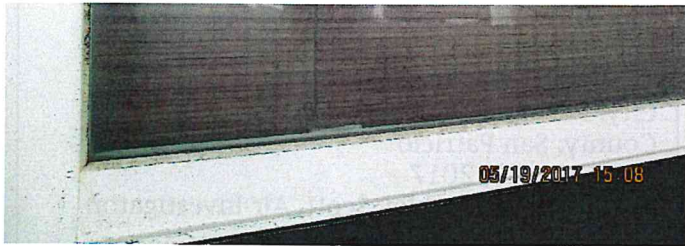
Subject: Location of sample collection-mini
refrigerator
Location: Citizen 52's Residence
TCEQ Incident No. 258167
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 80

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of sample collection-BBQ pit
Location: Citizen 52's Residence
TCEQ Incident No. 258167
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 81

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of sample collection-window ledge

Location: Citizen 53's Residence

TCEQ Incident No. 258200

City: Portland

County: San Patricio

Date: May 19, 2017

Photographer: Ashley Scott, Air Investigator

Digital File Location:

TCEQ Corpus Christi Regional Office

Photo No. 82

Note: The time stamp on the photo is 1 hour ahead.



Subject: Accumulation of metallic particles settled on the bottom of the pool

Location: Citizen 53's Residence

TCEQ Incident No. 258200

City: Portland

County: San Patricio

Date: May 19, 2017

Photographer: Ashley Scott, Air Investigator

Digital File Location:

TCEQ Corpus Christi Regional Office

Photo No. 83

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of Sample No. 1705016-005; front window glass

Location: Citizen 54's Residence

TCEQ Incident No. 258203

City: Portland

County: San Patricio

Date: May 19, 2017

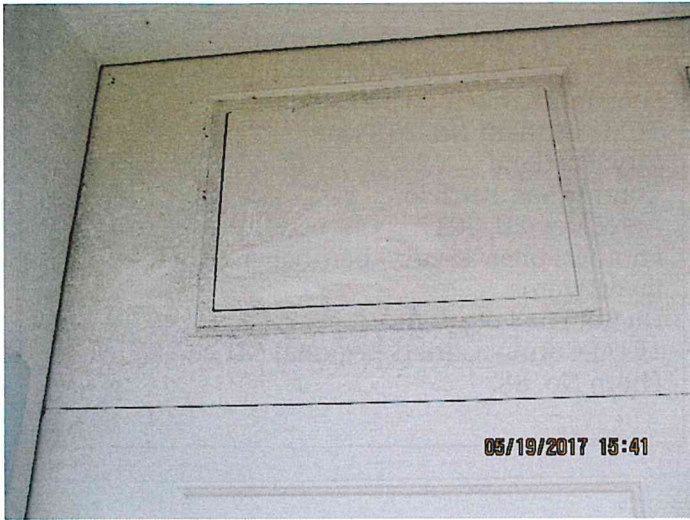
Photographer: Ashley Scott, Air Investigator

Digital File Location:

TCEQ Corpus Christi Regional Office

Photo No. 84

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of Sample No. 1705016-006;
back garage door
Location: Citizen 54's Residence
TCEQ Incident No. 258203
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 85

Note: The time stamp on the photo is 1 hour ahead.



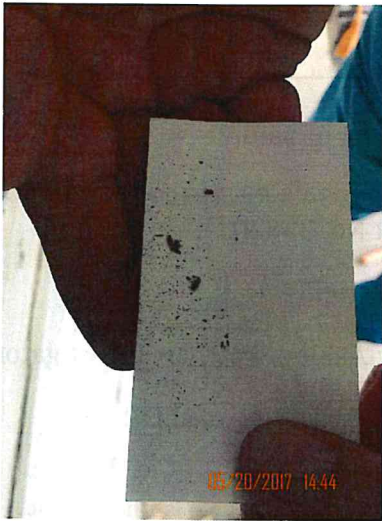
Subject: Location of sample collection-window
sill
Location: Citizen 55's Residence
TCEQ Incident No. 258223
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 86

Note: The time stamp on the photo is 1 hour ahead.

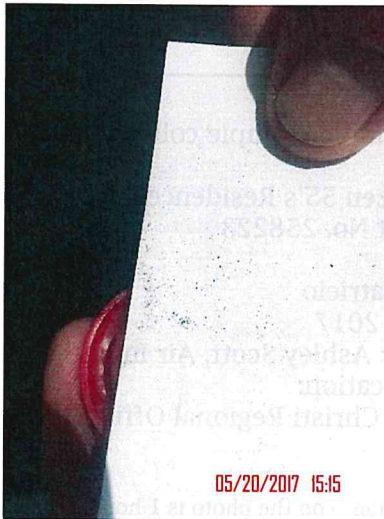


Subject: Accumulation of metallic particles
settled on the bottom of the pool
Location: Citizen 55's Residence
TCEQ Incident No. 258223
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 87

Note: The time stamp on the photo is 1 hour ahead.



Subject: Sample collected from back window
Location: Citizen 56's Residence
TCEQ Incident No. 258420
City: Portland
County: San Patricio
Date: May 20, 2017
Photographer: Kendra Bernhagen, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 88



Subject: Sample collected from front window
Location: Citizen 57's Residence
TCEQ Incident No. 258308
City: Portland
County: San Patricio
Date: May 20, 2017
Photographer: Kendra Bernhagen, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 89



Subject: Sample collected from back window
Location: Citizen 58's Residence
TCEQ Incident No. 258309
City: Portland
County: San Patricio
Date: May 20, 2017
Photographer: Kendra Bernhagen, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 90



Subject: Sample collected from front window
Location: Citizen 59's Residence
TCEQ Incident No. 258287
City: Portland
County: San Patricio
Date: May 20, 2017
Photographer: Kendra Bernhagen, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 91



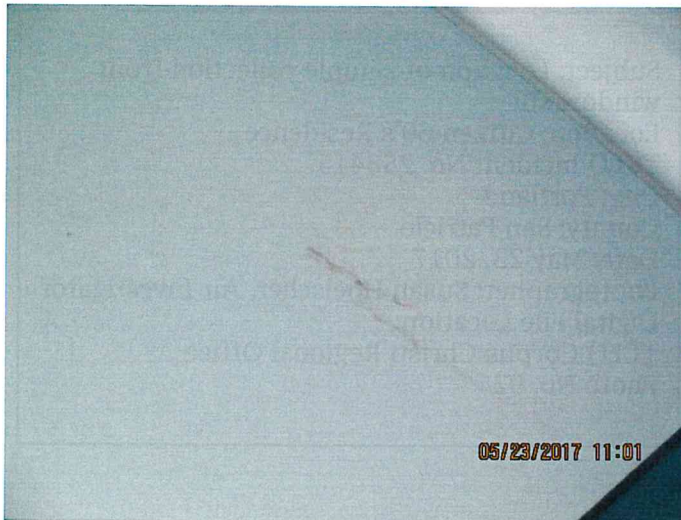
Subject: Location of sample collection-front window sill
Location: Citizen 60's Residence
TCEQ Incident No. 258415
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 92



Subject: Location of sample collection-front window sill
Location: Citizen 61's Residence
TCEQ Incident No. 258282
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 93



Subject: Location of sample collection-front window sill
Location: Citizen 62's Residence
TCEQ Incident No. 258199
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 94



Subject: Accumulation of metallic particles on a vehicle
Location: Citizen 63's Residence
TCEQ Incident No. 258413
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 95



Subject: Location of sample collection-front window ledge
Location: Citizen 63's Residence
TCEQ Incident No. 258413
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Karen Bridges, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 96



Subject: Location of sample collection-front window ledge
Location: Citizen 64's Residence
TCEQ Incident No. 258479
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 97



Subject: Location of sample collection-back porch window sill
Location: Citizen 67's Residence
TCEQ Incident No. 258408
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 98



Subject: Location of sample collection-front window sill
Location: Citizen 68's Residence
TCEQ Incident No. 258485
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 99



Subject: Location of sample collection-front patio table
Location: Citizen 68's Residence
TCEQ Incident No. 258485
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 100



Subject: Location of sample collection-trash can
Location: Citizen 70's Residence
TCEQ Incident No. 258470
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Travis Prater, Water Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 101

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of sample collection-front window
Location: Citizen 71's Residence
TCEQ Incident No. 258472
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Travis Prater, Water Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 102

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of sample collection-front window sill
Location: Citizen 72's Residence
TCEQ Incident No. 258471
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Travis Prater, Water Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 103

Note: The time stamp on the photo is 1 hour ahead.



Subject: Location of sample collection-front window sill
Location: Citizen 73's Residence
TCEQ Incident No. 258473
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Travis Prater, Water Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 104

Note: The time stamp on the photo is 1 hour ahead.

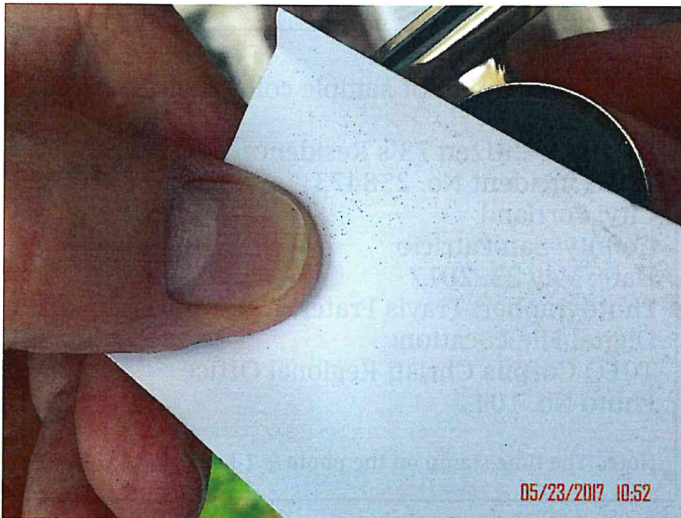


Subject: Location of sample collection-front window ledge
Location: Citizen 74's Residence
TCEQ Incident No. 258484
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Travis Prater, Water Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 105

Note: The time stamp on the photo is 1 hour ahead.



Subject: Sample collected from front window sill
Location: Citizen 75's Residence
TCEQ Incident No. 258418
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Kendra Bernhagen, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 106



Subject: Sample collected from front window sill
Location: Citizen 76's Residence
TCEQ Incident No. 258423
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Kendra Bernhagen, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 107



Subject: Sample collected from front window sill
Location: Citizen 77's Residence
TCEQ Incident No. 258424
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Kendra Bernhagen, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 108



Subject: Sample collected from front window sill
Location: Citizen 78's Residence
TCEQ Incident No. 258475
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Kendra Bernhagen, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 109



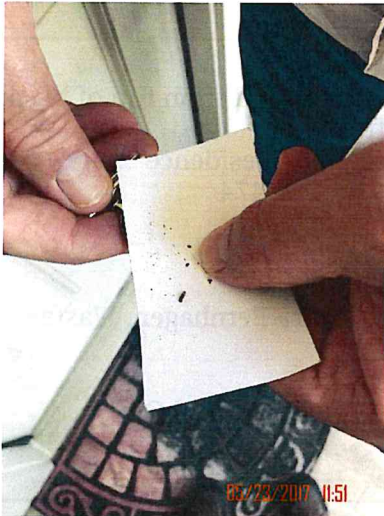
Subject: Sample collected from top of black box (attached) by front door
Location: Citizen 79's Residence
TCEQ Incident No. 258474
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Kendra Bernhagen, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 110



Subject: Sample collected from front window sill
Location: Citizen 80's Residence
TCEQ Incident No. 258476
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Kendra Bernhagen, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 111



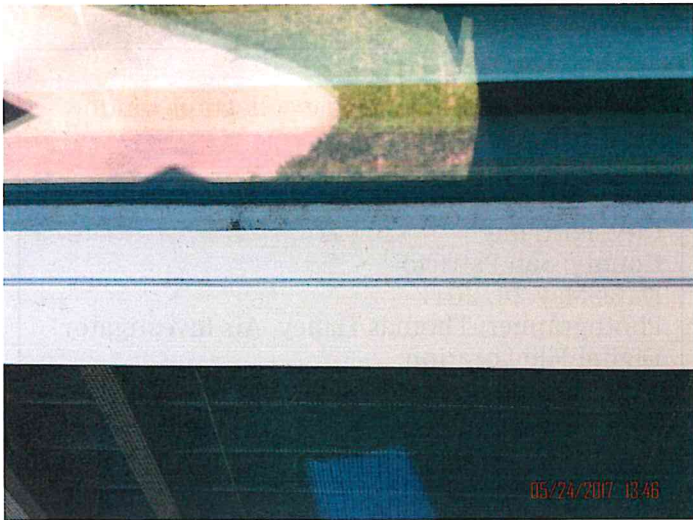
Subject: Sample collected from front window sill
Location: Citizen 81's Residence
TCEQ Incident No. 258477
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Kendra Bernhagen, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 112



Subject: Sample collected from front door panel
Location: Citizen 82's Residence
TCEQ Incident No. 258468
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Kendra Bernhagen, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 113



Subject: Sample collected from front window sill
Location: Citizen 83's Residence
TCEQ Incident No. 258482
City: Portland
County: San Patricio
Date: May 23, 2017
Photographer: Kendra Bernhagen, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 114



Subject: Location of sample collection-window ledge
Location: Citizen 84's Residence
TCEQ Incident No. 258557
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 115



Subject: Location of sample collection-window screen framework
Location: Citizen 85's Residence
TCEQ Incident No. 258590
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 116



Subject: Location of sample collection-window sill
Location: Citizen 86's Residence
TCEQ Incident No. 258595
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 117



Subject: Location of sample collection-window
screen framework
Location: Citizen 87's Residence
TCEQ Incident No. 258589
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 118



Subject: Location of sample collection-window
sill
Location: Citizen 88's Residence
TCEQ Incident No. 258596
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 119



Subject: Location of sample collection-window
sill
Location: Citizen 89's Residence
TCEQ Incident No. 258591
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 120



Subject: Location of sample collection-window sill
Location: Citizen 90's Residence
TCEQ Incident No. 258546
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 121



Subject: Location of sample collection-window sill
Location: Citizen 91's Residence
TCEQ Incident No. 258572
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 122



Subject: Location of sample collection-window screen framework
Location: Citizen 92's Residence
TCEQ Incident No. 258599
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 123



Subject: Location of sample collection-window
screen framework
Location: Citizen 93's Residence
TCEQ Incident No. 258554
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 124



Subject: Location of sample collection-window
ledge
Location: Citizen 94's Residence
TCEQ Incident No. 258581
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 125



Subject: Location of sample collection-outdoor
window air condition unit
Location: Citizen 97's Residence
TCEQ Incident No. 258646
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Corey Burke, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 126



Subject: Location of sample collection-window ledge
Location: Citizen 98's Residence
TCEQ Incident No. 258570
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Corey Burke, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 127



Subject: Location of sample collection-window sill
Location: Citizen 99's Residence
TCEQ Incident No. 258575
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Corey Burke, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 128



Subject: Location of sample collection-window ledge
Location: Citizen 100's Residence
TCEQ Incident No. 258580
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Corey Burke, Waste Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 129



Subject: Location of Sample No. 1706003-002;
southeast facing window sill
Location: Citizen 101's Residence
TCEQ Incident No. 258626
City: Portland
County: San Patricio
Date: May 25, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 130



Subject: Location of sample collection-window
sill
Location: Citizen 102's Residence
TCEQ Incident No. 258648
City: Portland
County: San Patricio
Date: May 25, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 131



Subject: Location of sample collection-window
ledge
Location: Citizen 103's Residence
TCEQ Incident No. 258660
City: Portland
County: San Patricio
Date: May 25, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 132



Subject: Location of sample collection-window ledge
Location: Citizen 104's Residence
TCEQ Incident No. 258996
City: Portland
County: San Patricio
Date: May 26, 2017
Photographer: Maria Sparks, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 133



Subject: Location of sample collection-window ledge
Location: Citizen 105's Residence
TCEQ Incident No. 258669
City: Portland
County: San Patricio
Date: May 26, 2017
Photographer: Maria Sparks, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 134



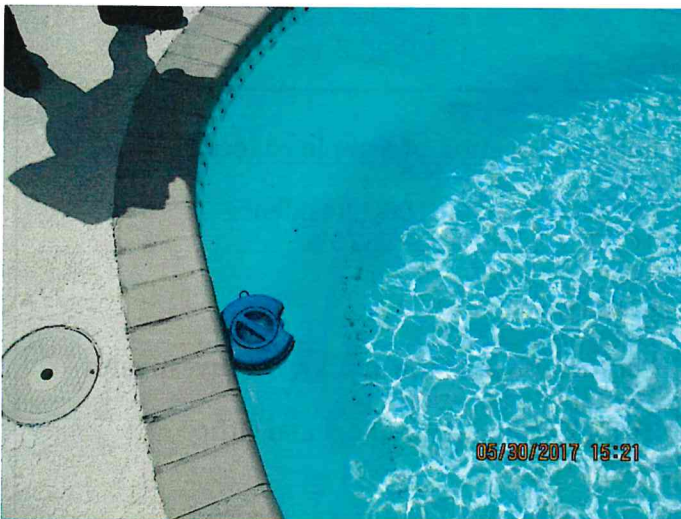
Subject: Location of sample collection-window sill
Location: Citizen 106's Residence
TCEQ Incident No. 258763
City: Portland
County: San Patricio
Date: May 26, 2017
Photographer: Maria Sparks, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 135



Subject: Location of sample collection-window ledge
Location: Citizen 110's Residence
TCEQ Incident No. 258764
City: Portland
County: San Patricio
Date: May 26, 2017
Photographer: Maria Sparks, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 136



Subject: Demonstration of magnetic property of the metallic particles in Citizen 111's pool
Location: Citizen 111's Residence
TCEQ Incident No. 258968
City: Portland
County: San Patricio
Date: May 30, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 137



Subject: Accumulation of metallic particles settled on the bottom of the pool
Location: Citizen 111's Residence
TCEQ Incident No. 258968
City: Portland
County: San Patricio
Date: May 30, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 138



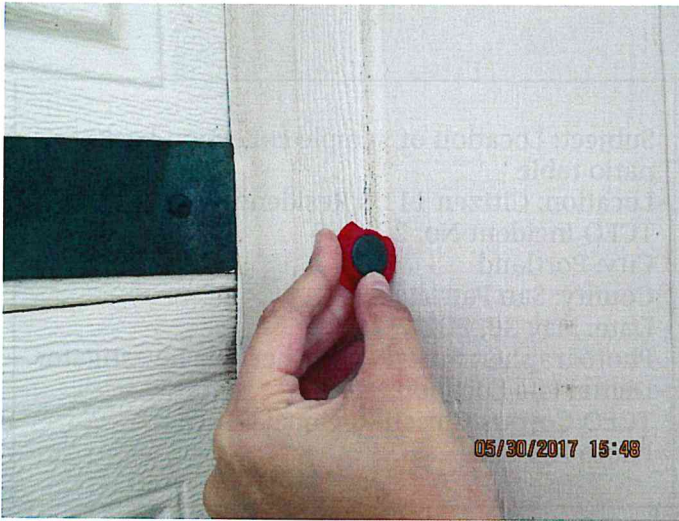
Subject: Location of sample collection-back patio table
Location: Citizen 111's Residence
TCEQ Incident No. 258968
City: Portland
County: San Patricio
Date: May 30, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 139



Subject: Location of sample collection-front window ledge
Location: Citizen 112's Residence
TCEQ Incident No. 258969
City: Portland
County: San Patricio
Date: May 30, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 140



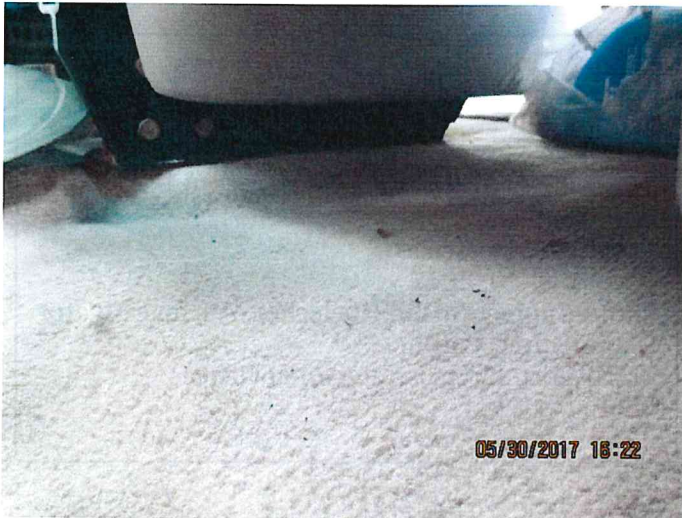
Subject: Location of sample collection-front window sill
Location: Citizen 113's Residence
TCEQ Incident No. 258990
City: Portland
County: San Patricio
Date: May 30, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 141



Subject: Location of sample collection-garage door seal
Location: Citizen 113's Residence
TCEQ Incident No. 258990
City: Portland
County: San Patricio
Date: May 30, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 142



Subject: Location of sample collection-front window screen framework
Location: Citizen 114's Residence
TCEQ Incident No. 259004
City: Portland
County: San Patricio
Date: May 30, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 143



Subject: Location of Sample No. 1706004-001; floor board inside a car
Location: Citizen 115's Residence
TCEQ Incident No. 259029
City: Portland
County: San Patricio
Date: May 30, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 144



Subject: Location of Sample No. 1706004-002;
outdoor garage light bulb
Location: Citizen 115's Residence
TCEQ Incident No. 259029
City: Portland
County: San Patricio
Date: May 30, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 145



Subject: Location of sample collection-front
window ledge
Location: Citizen 116's Residence
TCEQ Incident No. 259152
City: Portland
County: San Patricio
Date: June 2, 2017
Photographer: Cindy Smith, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 146



Subject: Location of sample collection-front
window ledge
Location: Citizen 117's Residence
TCEQ Incident No. 259150
City: Portland
County: San Patricio
Date: June 2, 2017
Photographer: Cindy Smith, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 147



Subject: Location of sample collection-front window ledge
Location: Citizen 118's Residence
TCEQ Incident No. 259692
City: Portland
County: San Patricio
Date: June 2, 2017
Photographer: Cindy Smith, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 148



Subject: Location of sample collection-front window ledge
Location: Citizen 119's Residence
TCEQ Incident No. 259693
City: Portland
County: San Patricio
Date: June 5, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 149



Subject: Accumulation of metallic particles settled in the pool
Location: Citizen 120's Residence
TCEQ Incident No. 259694
City: Portland
County: San Patricio
Date: June 5, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 150



Subject: Demonstration of magnetic property of the metallic particles in Citizen 120's pool
Location: Citizen 120's Residence
TCEQ Incident No. 259694
City: Portland
County: San Patricio
Date: June 5, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 151



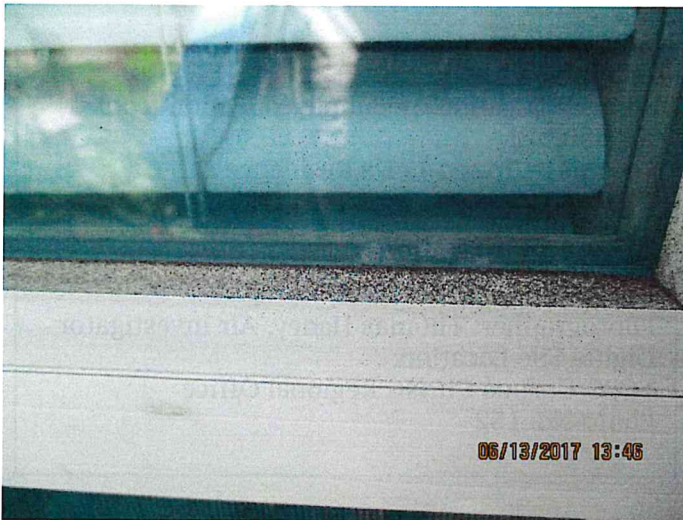
Subject: Location of sample collection-front window sill
Location: Citizen 121's Residence
TCEQ Incident No. 259695
City: Portland
County: San Patricio
Date: June 8, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 152



Subject: Location of sample collection-front window sill
Location: Citizen 122's Residence
TCEQ Incident No. 259742
City: Portland
County: San Patricio
Date: June 8, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 153



Subject: Location of sample collection-front window sill
Location: Citizen 123's Residence
TCEQ Incident No. 259752
City: Portland
County: San Patricio
Date: June 8, 2017
Photographer: Thomas Haney, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 154



Subject: Location of sample collection-front window ledge
Location: Citizen 126's Residence
TCEQ Incident No. 260218
City: Portland
County: San Patricio
Date: June 13, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 155



Subject: Location of sample collection-outlet box by front door
Location: Citizen 128's Residence
TCEQ Incident No. 260216
City: Portland
County: San Patricio
Date: June 13, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 156



Subject: Location of sample collection-front window sill
Location: Citizen 128's Residence
TCEQ Incident No. 260216
City: Portland
County: San Patricio
Date: June 13, 2017
Photographer: Ashley Scott, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 157



Subject: Location of sample collection-front window ledge
Location: Citizen 129's Residence
TCEQ Incident No. 260253
City: Portland
County: San Patricio
Date: June 15, 2017
Photographer: Jessica Fox, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 158



Subject: Location of sample collection-front window ledge
Location: Citizen 130's Residence
TCEQ Incident No. 260266
City: Portland
County: San Patricio
Date: June 15, 2017
Photographer: Jessica Fox, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 159



Subject: Location of sample collection-back window ledge
Location: Citizen 133's Residence
TCEQ Incident No. 260562
City: Portland
County: San Patricio
Date: June 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 160



Subject: Location of sample collection-front window ledge
Location: Citizen 135's Residence
TCEQ Incident No. 260903
City: Portland
County: San Patricio
Date: June 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 161



Subject: Accumulation of metallic particles settled on the bottom of the children's pool
Location: Citizen 135's Residence
TCEQ Incident No. 260903
City: Portland
County: San Patricio
Date: June 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 162



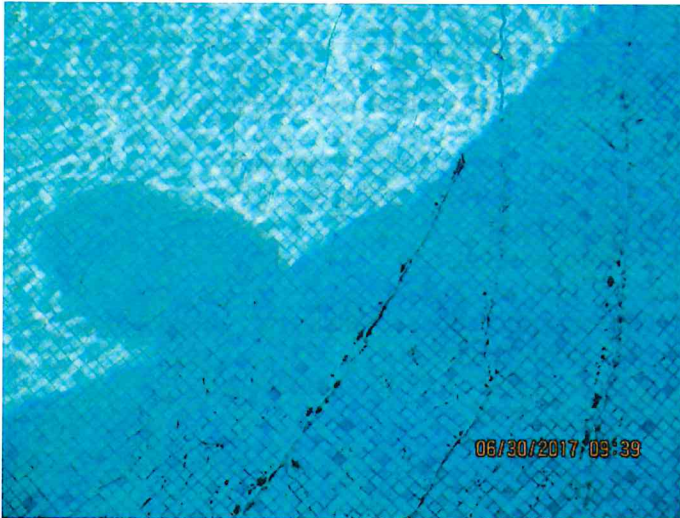
Subject: Accumulation of metallic particles on vehicle hood
Location: Citizen 136's Residence
TCEQ Incident No. 261418
City: Portland
County: San Patricio
Date: June 30, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 163



Subject: Location of sample collection-front window sill
Location: Citizen 136's Residence
TCEQ Incident No. 261418
City: Portland
County: San Patricio
Date: June 30, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 164



Subject: Location of sample collection-front window sill
Location: Citizen 137's Residence
TCEQ Incident No. 261445
City: Portland
County: San Patricio
Date: June 30, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 165



Subject: Accumulation of metallic particles settled on the bottom of the pool
Location: Citizen 137's Residence
TCEQ Incident No. 261445
City: Portland
County: San Patricio
Date: June 30, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 166



Subject: Location of sample collection-side window sill
Location: Citizen 138's Residence
TCEQ Incident No. 262147
City: Portland
County: San Patricio
Date: July 13, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 167



Subject: Location of sample collection-front door
Location: Citizen 138's Residence
TCEQ Incident No. 262147
City: Portland
County: San Patricio
Date: July 13, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 168



Subject: Location of sample collection-front
window ledge
Location: Citizen 140's Residence
TCEQ Incident No. 267252
City: Portland
County: San Patricio
Date: September 8, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 169



ATTACHMENT 3
Laboratory Analysis Request No. 1705011

Total Pages: 10

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 – September 8, 2017

Texas Commission on Environmental Quality

Laboratory and Quality Assurance Section
P.O. Box 13087, MC-165
Austin, Texas 78711-3087
(512) 239-1716

Laboratory Analysis Results

Request Number: 1705011

Request Lead: Frank Martinez

Region: T14

Date Received: 5/19/2017

Facility(ies) Sampled	City	County	Facility Type
La Quinta Plant Voestalpine	Portland	San Patricio	Manufacturing

Sample(s) Received

Field ID Number: A Laboratory Sample Number: 1705011-001 Sampled by: Susan Hoelscher
Sampling Site: Complainant's Property Date & Time Sampled: 05/16/17 17:15:00 Valid Sample: Yes
Comments: Tape lift from the siding on the front outer wall (painted dark yellow) located on the southeast side of the residence.
(CMP 1)

Field ID Number: B Laboratory Sample Number: 1705011-002 Sampled by: Susan Hoelscher
Sampling Site: Complainant's Property Date & Time Sampled: 05/16/17 17:17:00 Valid Sample: Yes
Comments: Tape lift from an outside window glass located on the southeast (front) side of the residence. (CMP 1)

Field ID Number: C Laboratory Sample Number: 1705011-003 Sampled by: Susan Hoelscher
Sampling Site: Complainant's Property Date & Time Sampled: 05/16/17 17:38:00 Valid Sample: Yes
Comments: Tape lift from an outdoor light glass cover located on the northwest (front) side of the residence. (CMP 2)

Field ID Number: D Laboratory Sample Number: 1705011-004 Sampled by: Susan Hoelscher
Sampling Site: Complainant's Property Date & Time Sampled: 05/16/17 17:40:00 Valid Sample: Yes
Comments: Tape lift from a plastic (tan) storage box located on the northwest (front) side of the residence. (CMP 2)

Field ID Number: E Laboratory Sample Number: 1705011-005 Sampled by: Susan Hoelscher
Sampling Site: Complainant's Property Date & Time Sampled: 05/16/17 17:51:00 Valid Sample: Yes
Comments: Tape lift from the front door (outside) window sill (white) located on the southeast (front) side of the residence. (CMP 3)

Field ID Number: F Laboratory Sample Number: 1705011-006 Sampled by: Susan Hoelscher
Sampling Site: Complainant's Property Date & Time Sampled: 05/16/17 17:50:00 Valid Sample: Yes
Comments: Tape lift from an outside window glass located on the southeast (front) side of the residence. (CMP 3)

Field ID Number: G Laboratory Sample Number: 1705011-007 Sampled by: Susan Hoelscher
Sampling Site: Complainant's Property Date & Time Sampled: 05/16/17 18:25:00 Valid Sample: Yes
Comments: Tape lift from an outdoor light glass cover located on the northeast (front) side of the residence. (CMP 4)

Field ID Number: H Laboratory Sample Number: 1705011-008 Sampled by: Susan Hoelscher
Sampling Site: Complainant's Property Date & Time Sampled: 05/16/17 18:27:00 Valid Sample: Yes
Comments: Tape lift from an outside window glass located on the northeast (front) side of the residence. (CMP 4)

Field ID Number: RS1 Laboratory Sample Number: 1705011-009RS Sampled by: Susan Hoelscher
Sampling Site: Suspected Source Date & Time Sampled: 05/17/17 07:55:00 Valid Sample: Yes
Comments: Bulk sample taken from a remet pellet stockpile stored on a pad located on the north side of Voestalpine's property and southeast of the complainants' residences.

Field ID Number: RS2 Laboratory Sample Number: 1705011-010RS Sampled by: Susan Hoelscher
Sampling Site: Suspected Source Date & Time Sampled: 05/17/17 08:00:00 Valid Sample: Yes
Comments: Bulk sample taken from a remet fines stockpile stored on a pad located on the north side of the Voestalpine's property and southeast of the complainants' residence.

Laboratory Analysis Results

Request Number: 1705011

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705011-001

Analysis began: 5/22/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 5/26/2017

Sample A was lightly loaded. The sample contained between 51 and 60% metal particles. The metal particles ranged in coloration from black to reddish. This coloration was consistent with all the field samples and reference samples 1705011-010RS, 011RS, and 012RS. Metal particles (reddish) ranged in size from 1 to 800 microns. Metal particles (black) ranged in size from 5 to 400 microns. The sample also contained between 31 and 40% common clays and minerals. Other particles present in quantities less than 5% included carbonaceous material, fungal spores, yellow paint overspray, plant stellate hairs, and pollen.

Sample Number: 1705011-001

Analysis began: 5/23/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC Analysis completed: 5/26/2017

Energy dispersive spectroscopy (EDS) analysis of a metal particle showed elements carbon, oxygen, sodium, aluminum, silicon, chlorine, potassium, calcium, iron, and zinc. The primary peaks in the x-ray spectrum were oxygen, aluminum, silicon, chlorine and iron.

EDS analysis of a second metal particle showed elements carbon, oxygen, aluminum, silicon, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen, silicon, calcium, and iron. The x-ray spectrum of the second metal particle is consistent with the reference samples submitted with this request number, 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as limestone and feldspar.

Sample Number: 1705011-002

Analysis began: 5/22/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 5/26/2017

Sample B was lightly loaded. The sample contained between 41 and 50% metal particles. Metal particles (reddish) ranged in size from 1 to 800 microns. Metal particles (black) ranged in size from 5 to 400 microns. The sample contained between 21 and 30% common clays and minerals and between 5 and 20% fungal spores. Other particles present in quantities less than 5% included plant stellate hairs, plant trichomes, pollen, and rubber dust.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Laboratory Analysis Results

Request Number: 1705011

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705011-002

Analysis began: 5/23/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC Analysis completed: 5/26/2017

EDS analysis of a metal particle showed elements carbon, oxygen, sodium, magnesium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were carbon, oxygen, aluminum, silicon, chlorine, calcium, and iron.

EDS analysis of a second metal particle showed elements carbon, oxygen, silicon, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

These x-ray spectra of metal particles are consistent with the reference samples submitted with this request number, 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as limestone and quartz.

Sample Number: 1705011-003

Analysis began: 5/22/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 5/26/2017

Sample C was lightly loaded. The sample contained between 5 and 20% metal particles. Metal particles (reddish) ranged in size from 1 to 800 microns. Metal particles (black) ranged in size from 5 to 400 microns. The sample contained between 41 and 50% common clays and minerals and between 31 and 40% carbonaceous material. Other particles present in quantities less than 5% included fungal spores, and plant stellate hairs.

Sample Number: 1705011-003

Analysis began: 5/23/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC Analysis completed: 5/26/2017

EDS analysis of a metal particle showed elements carbon, oxygen, magnesium, aluminum, silicon, potassium, titanium, and iron. The primary peaks in the x-ray spectrum were oxygen, aluminum, silicon, titanium, and iron.

EDS analysis of several particles confirmed the presence of common clays and minerals such as feldspar and quartz.

Sample Number: 1705011-004

Analysis began: 5/22/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 5/26/2017

Sample D was moderately loaded. The sample contained between 51 and 60% metal particles. Metal particles (reddish) ranged in size from 1 to 800 microns. Metal particles (black) ranged in size from 5 to 400 microns. The sample contained between 31 and 40% common clays and minerals. Other particles present in quantities less than 5% included carbonaceous material, fungal spores, plant stellate hairs, and pollen.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Laboratory Analysis Results

Request Number: 1705011

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705011-004

Analysis began: 5/23/2017

Analyst: Jeffrey Kettelman

SOP: AP008MIC Analysis completed: 5/26/2017

EDS analysis of a metal particle showed elements carbon, oxygen, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

EDS analysis of a second metal particle showed elements carbon, oxygen, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen, calcium, and iron. These x-ray spectra of metal particles are consistent with the reference samples submitted with this request number, 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as feldspar and quartz.

Sample Number: 1705011-005

Analysis began: 5/22/2017

Analyst: Jeffrey Kettelman

SOP: AP007MIC Analysis completed: 5/26/2017

Sample E was lightly loaded. The sample contained between 61 and 71% metal particles. Metal particles (reddish) ranged in size from 1 to 800 microns. Metal particles (black) ranged in size from 5 to 400 microns. The sample contained between 21 and 30% common clays and minerals. Other particles present in quantities less than 5% included fungal spores, plant fibers, and pollen.

Sample Number: 1705011-005

Analysis began: 5/23/2017

Analyst: Jeffrey Kettelman

SOP: AP008MIC Analysis completed: 5/26/2017

EDS analysis of a metal particle showed elements carbon, oxygen, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

EDS analysis of a second metal particle showed elements carbon, oxygen, sodium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen, silicon, chlorine, calcium, and iron.

These x-ray spectra of metal particles are consistent with the reference samples submitted with this request number, 1705011.

Sample Number: 1705011-006

Analysis began: 5/22/2017

Analyst: Jeffrey Kettelman

SOP: AP007MIC Analysis completed: 5/26/2017

Sample F was lightly loaded. The sample contained between 61 and 70% metal particles. Metal particles (reddish) ranged in size from 1 to 800 microns. Metal particles (black) ranged in size from 5 to 400 microns. The sample contained between 5 and 20% common clays and minerals, and between 5 and 20% plant fibers. Other particles present in quantities less than 5% included pollen.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Laboratory Analysis Results

Request Number: 1705011

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705011-006

Analysis began: 5/23/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC Analysis completed: 5/26/2017

EDS analysis of a metal particle showed elements carbon, oxygen, sodium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen, sodium, chlorine, and iron.

EDS analysis of a second metal particle showed elements oxygen, aluminum, silicon, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

These x-ray spectra of metal particles are consistent with the reference samples submitted with this request number, 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as feldspar and quartz.

Sample Number: 1705011-007

Analysis began: 5/22/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 5/26/2017

Sample G was lightly loaded. The sample contained between 21 and 30% metal particles. Metal particles (reddish) ranged in size from 1 to 700 microns. Metal particles (black) ranged in size from 5 to 300 microns. The sample contained between 41 and 50% insect parts and between 5 and 20% common clays and minerals. Other particles present in quantities less than 5% included pollen.

Sample Number: 1705011-007

Analysis began: 5/23/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC Analysis completed: 5/26/2017

EDS analysis of a metal particle showed elements carbon, oxygen, chlorine, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

The x-ray spectrum of the metal particle is consistent with the reference samples submitted with this request number, 1705011.

EDS analysis of a second metal particle showed elements carbon, oxygen, sodium, magnesium, aluminum, silicon, sulfur, chlorine, potassium, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen, aluminum, silicon, sulfur, and iron.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz.

Sample Number: 1705011-008

Analysis began: 5/22/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 5/26/2017

Sample H was lightly loaded. Metal particles accounted for over 80% of the particle coverage. Metal particles (reddish) ranged in size from 1 to 700 microns. Metal particles (black) ranged in size from 5 to 400 microns. The sample contained between 5 and 20% common clays and minerals. Other particles present in quantities less than 5% included carbonaceous material, and plant stellate hairs.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Laboratory Analysis Results

Request Number: 1705011

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705011-008

Analysis began: 5/23/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC

Analysis completed: 5/26/2017

EDS analysis of a metal particle showed elements carbon, oxygen, aluminum, silicon, calcium, and iron. The primary peaks in the x-ray spectrum were calcium and iron.

EDS analysis of a second metal particle showed elements carbon, oxygen, silicon, calcium, and iron. The primary peak in the x-ray spectrum was iron.

These x-ray spectra of metal particles are consistent with the reference samples submitted with this request number, 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz.

Sample Number: 1705011-009RS

Analysis began: 5/22/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC

Analysis completed: 5/26/2017

Sample RS1 was a bulk sample. Metal particles accounted for over 80% of the particle coverage. The remet pellets consisted of large black metal particles over 1cm in diameter.

Sample Number: 1705011-009RS

Analysis began: 5/23/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC

Analysis completed: 5/26/2017

EDS analysis of a remet pellet (metal particle) showed elements carbon, oxygen, aluminum, silicon, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

EDS analysis of a second remet pellet (metal particle) showed elements carbon, oxygen, aluminum, silicon, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

Sample Number: 1705011-010RS

Analysis began: 5/22/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC

Analysis completed: 5/26/2017

Sample RS2 was a bulk sample. Metal particles accounted for over 80% of the particle coverage. The remet fines consisted of metal particles that varied in coloration from black to reddish. Metal particles (reddish) ranged in size from 1 to 5000 microns. Metal particles (black) ranged in size from 5 to 400 microns. Other particles present in quantities less than 5% included common clays and minerals.

Sample Number: 1705011-010RS

Analysis began: 5/23/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC

Analysis completed: 5/26/2017

EDS analysis of a remet fines particle (metal particle) showed elements carbon, oxygen, magnesium, aluminum, silicon, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen, calcium, and iron.

EDS analysis of a second remet fines particle (metal particle) showed elements carbon, oxygen, silicon, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Attachment 3

Inv. No. 1415945

Page 7 of 10

Laboratory Analysis Results

Request Number: 1705011

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705011-011RS

Analysis began: 5/22/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC

Analysis completed: 5/26/2017

Sample RS3 was a bulk sample. Metal particles accounted for over 80% of the particle coverage. The unprocessed fines pellets consisted of metal particles that varied in coloration from black to reddish. Metal particle (reddish) ranged in size from 1 to 5000 microns. Metal particles (black) ranged in size from 5 to 1000 microns.

Sample Number: 1705011-011RS

Analysis began: 5/23/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC

Analysis completed: 5/26/2017

EDS analysis of a unprocessed fines pellet (metal particle) showed elements carbon, oxygen, aluminum, silicon, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron. EDS analysis of a second unprocessed fines pellet (metal particle) showed elements carbon, oxygen, aluminum, silicon, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

Sample Number: 1705011-012RS

Analysis began: 5/22/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC

Analysis completed: 5/26/2017

Sample RS4 was a bulk sample. Metal particles accounted for over 80% of the particle coverage. The HBI fines consisted of metal particles that varied in coloration from black to reddish. Metal particles (reddish) ranged in size from 1 to 5000 microns. Metal particles (black) ranged in size from 5 to 400 microns.

Sample Number: 1705011-012RS

Analysis began: 5/23/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC

Analysis completed: 5/26/2017

EDS analysis of a HBI fines (metal particle) showed elements carbon, oxygen, aluminum, silicon, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron. EDS analysis of a second HBI fines (metal particle) showed elements carbon, oxygen, aluminum, silicon, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

TCEQ laboratory customer support may be reached at Frank.Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Laboratory Analysis Results

Request Number: 1705011

Analysis Code: AP008MIC

Qualifier Notes:

ND - not detected

NQ - concentration can not be quantified due to possible interferences or coelutions.

SDL - Sample Detection Limit (Limit of Detection adjusted for dilutions).

SQL - Sample Quantitation Limit (Limit of Quantitation adjusted for dilution).

INV - Invalid.

J - Reported concentration is below SDL.

L - Reported concentration is at or above the SDL and is below the lower limit of quantitation.

E - Reported concentration exceeds the upper limit of instrument calibration.

M - Result modified from previous result.

T - Data was not confirmed by a confirmational analysis. Compound and/or results is tentatively identified.

F - Established acceptance criteria was not met due to factors outside the laboratory's control.

H - Not all associated hold time specifications were met. Data may be biased.

C - Sample received with a missing or broken custody seal.

R - Sample received with a missing or incomplete chain of custody.

I - Sample received without a legible unique identifier.

G - Sample received in an improper container.

U - Sample received with insufficient sample volume.

W - Sample received with insufficient preservation.

TCEQ laboratory customer support may be reached at Frank.Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Susan Hoelscher

From: Jaydeep Patel
Sent: Friday, May 26, 2017 2:20 PM
To: Kelly Ruble; Hattie Waites; Susan Hoelscher
Cc: Frank Martinez; Sonny Lopez; Ashley Scott
Subject: Request Report 1705011
Attachments: 1705011.pdf

Good afternoon Kelly,

Attached is your PDF file for Request Report 1705011.

You will not receive a hard copy.

Thanks,

OAL Work Leader,
Monitoring Division
Texas Commission on Environmental Quality
Jaydeep.Patel@tceq.texas.gov
512-239-2257



ATTACHMENT 4
May 17, 2017 Reference Sample Photographs

Total Pages: 2

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 – September 8, 2017



Subject: Location of Reference Sample No. 1705011-009RS; remelt pellets
Location: North side of Voestalpine's property
Direction: Facing northeast
City: Portland
County: San Patricio
Date: May 17, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 1



Subject: Location of Reference Sample No. 1705011-010RS; remelt fines
Location: North side of Voestalpine's property
Direction: Facing east
City: Portland
County: San Patricio
Date: May 17, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 2



Subject: Location of Reference Sample No. 1705011-011RS; fines unprocessed pellets
Location: South side of Voestalpine's property
Direction: Facing northeast
City: Portland
County: San Patricio
Date: May 17, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 3



Subject: Location of Reference Sample No. 1705011-012RS; HBI fines
Location: South side of Voestalpine's property
Direction: Facing west
City: Portland
County: San Patricio
Date: May 17, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 4



Subject: Bulk pile of HBI fines (Reference Sample No. 1705011-012RS)
Location: South side of Voestalpine's property
Direction: Facing west
City: Portland
County: San Patricio
Date: May 17, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 5



ATTACHMENT 5
Process Description and Safety Data Sheets

Total Pages: 38

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 - September 8, 2017

Susan Hoelscher

From:
Sent: Wednesday, May 17, 2017 12:57 PM
To: Susan Hoelscher; kelly.ruble@tceq.tx.gov
Subject: RE: Voestalpine Dust Complaint Investigation May 2017
Attachments: Safety data sheet – Pellets - BBS.PDF; TWG138 - Iron ore agglomerates SDS LKAB iron ore pellets 2017.pdf; 20160428_Vale SDS Agglomerates_PelletsRH20.pdf; 20150505_IOCC_MSDS SAP and DR.PDF; HBI.PDF

Susan and Kelly,

Attached are the SDS sheets for the iron pellets that we have received here on our site. I have also included the SDS sheet for our HBI that Susan requested. Below is a description of our plants operations. I hope that this information is of some assistance to you.

Also, I will remain as the single point of contact for you until Shannon Parham returns to the office next week. Please feel free to contact me if you have any questions:

The La Quinta Plant consists of Direct Reduced Iron (DRI) and Hot Briquetting (HBI) operations. The general process at the facility includes the conversion of iron oxide pellets into iron pellets that are pressed into iron briquettes. The DRI process consists of two main components, a Reformer (to produce the reducing agent) and the DRI reactor (where the reaction occurs). The DRI process converts pre-processed iron oxide pellets into highly metallized iron in the form of DRI or hot briquetted iron (HBI), which are ideal feed materials for high quality steelmaking.

The facility consists of a gantry crane for loading and unloading on the dock, oxide transfer points, an oxide day bin, oxide tower transfer, furnace charge hopper loading silos, a charge hopper, the reformer main flue ejector stack, furnace dedusting, briquetter dedusting, a flare for hot pressure relief venting, a hot briquetted iron (HBI) cooling conveyor, an HBI pile, fines storage, process water degassers, and a salt water cooling tower.

Iron Oxide Storage and Handling

Direct Reduction (DR) grade pellets are delivered in the surge bin at the port. After weighing the pellets, a conveyor transports the pellets to the pellet pile. The pellet pile is equipped with a stacker/reclaimer and will maintain a sufficient supply for one month of operation. The pellets are weighed and transferred to the oxide day bins. The day bins act as a buffer of prepared oxide that is fed to the shaft furnace.

The day bins then discharge to a screening operation to separate the offspecification fractions from the desired 6-20 mm oxide fractions. The desired oxide fractions are discharged on the oxide transfer conveyor. The offspecification material is screened further to identify usable fractions.

The material on the oxide transfer conveyor is weighed and discharged onto the furnace feed conveyor. The furnace feed conveyor is a vertical,

pocket type conveyor with flexible sidewalls that deliver material to the top of the shaft furnace structure. The closed furnace feed conveyor discharges through a riffler to the charge hopper at the top of the shaft furnace. The oxide coating station enables feeding of coating directly to the charge hopper of the shaft furnace. The coating is a solid material consisting of cement, burnt lime, hydrated lime and hydrated dolomite to assist in the reaction process. These materials are maintained in individual silos. A weight indicator in the charge hopper keeps the operator informed of the quantity of feed in the charge hopper. All process operations within the Iron Oxide Storage and Handling system are routed to various baghouses for the control of particulate emissions. The storage pile and associated operations are controlled with fugitive suppressants.

Product Material Handling

The material is transferred from the briquette cooling conveyors to the HBI conveyors, which are equipped with product scales. The HBI product is transported to the product screening station 1 where it is separated into product fines (0-6.35mm) and HBI (6.35-120mm). The fines are fed into a ground floor product fines bunker, while the HBI is weighed and transported on the product collection conveyor to the stacker conveyor for storage. The HBI product storage has a capacity of 100,000 tons per pile. The HBI is reclaimed from the HBI product storage and transported via conveyor to the product screening station 2, where it is screened; the HBI is weighed and transported via conveyor to the port. All process operations within the Product Material Handling system are routed to various baghouses for the control of particulate emissions. The storage pile and associated operations are controlled with fugitive suppressants.

Thank you,

Timothy Vanlandingham
Head of Safety, Security and Emergency Management

voestalpine Texas LLC
2800 Kay Bailey Hutchison Road
Portland, TX 78374, USA
Cell +1 361 800 1669

<http://www.voestalpine.com/texas>

voestalpine - One step ahead.

From: Susan Hoelscher [mailto:Susan.Hoelscher@tceq.texas.gov]
Sent: Wednesday, May 17, 2017 11:35 AM
To: Vanlandingham Tim
Subject: RE: Voestalpine Dust Complaint Investigation May 2017

Tim,



Attached is the 2nd set of photos.

SAFETY DATA SHEET – IRON ORE PELLETS – BBS

SECTION 1 – IDENTIFICATION

Manufacturer: ArcelorMittal Mining Canada GP		Emergency phone.	1-760-476-3962 (code 333211)
		REACH number.	1-2119474335-36-0005
		UN number.	N.A.
Address.	24 Blvd. Des Îles Port-Cartier (Quebec) G5B 2H3 418-766-2000	Chemical name.	Iron ore pellets
		Commercial name and synonyms.	Low silica acid pellets – BBS
		Chemical family.	Iron ore
Use.	Used as the iron feedstock in direct reduction process (DRI) for steel production.	Formula.	Cooked blend of iron ore, dolomite, bentonite and limestone, the main component is Fe ₂ O ₃ .

SECTION 2 – HAZARDS IDENTIFICATION

This product is not a hazardous material with the HPR classification criteria. Iron ore and pellets are inert solids and do not meet the requirements for classification as dangerous under both dangerous substances EU (67/548 / EEC) Directive and the other based on the classification, labeling and packaging of substances and mixtures (CLP) Regulations (EC 1272/2008). None of the chemicals in this product are considered highly hazardous by OSHA.			
	Respiratory sensitization.		Eye irritation.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Substance	CAS N°	DL50	CL50	TLV (Units)	Substance	CAS N°	DL50	CL50	TLV (Units)
Fe ₂ O ₃	1309-37-1	N.D.	N.D.	5 mg/m ³	CaO	1305-78-8	N.D.	N.D.	2.0
SiO ₂ (crys)	14808-60-7	N.D.	N.D.	0.1 (RD)	MgO	1309-48-4	N.D.	N.D.	10.0
Al ₂ O ₃	1344-28-1	N.D.	N.D.	10.0	MnO	1344-43-0	N.D.	N.D.	10.0
TiO ₂	13463-67-7	N.D.	N.D.	10.0	P ₂ O ₅	1314-56-3	N.D.	N.D.	10.0

SECTION 4 – FIRST AID MEASURES

Inhalation.	Move victim to a well ventilated area and consult medical staff.
Eye contact.	Flush eyes with water for at least 10 minutes or until the product are removed. If irritation persists, consult medical staff.
Skin contact.	The product does not irritate the skin, wash with soap and water.
Ingestion.	If swallowed, rinse mouth and drink plenty of water. Consult medical staff immediately.

SECTION 5 – FIREFIGHTING MEASURES

Flash point.	N.A.
T° Auto-ignition.	N.A.
Lower explosion limit.	N.A.
Upper explosion limit.	N.A.
Fire / explosion.	This product is not flammable.
Extinguishing media.	If product is involved in fire, use any extinguishing media appropriate to surrounding.
Special equipment.	Wear self-contained breathing apparatus with a full face mask. Wear gloves and appropriate protective clothing.
NFPA 704 rating.	Health = 2; Inflammability = 0; Instability/Reactivity = 0; Special notices = N.A.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Action to be taken when the material is discharged.	No special precautions, remove material with suitable equipment depending on the quantity spilled.
---	--

SECTION 7 – HANDLING AND STORAGE

Precautions in handling and storage.	<p>Storage and iron ore product handling can lead to releases of dust drift.</p> <p>Minimize dust generation using shovels and mechanical equipment instead of hand tools. Ideally a wet sweep or vacuum suction system should be used to remove dust when cleaning. If the environment is dusty, appropriate respiratory protection approved must be worn (see Section 8).</p> <p>Usually stored in heaps outdoors and in dry conditions, iron ore can be kept moist by spraying water to minimize dust emissions. The uses of surfactants, wetting agents, etc., constitute another method for removing the dust.</p>
Angle of repose: 27 degrees.	Bulk density: 2.09 nt/m ³

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory tracts.	<p>Wear respiratory protective equipment if concentration of smoke or dust in the workplace is higher than the TLV (5 mg/m³, value for fumes and dust, as Fe (iron)). Respiratory protective equipment must be selected, adjusted, maintained and inspected in accordance with NIOSH or equivalent regulations.</p> <p>Occupational exposure limits (OEL) should be followed in accordance with regulations applicable at the place of use of the product.</p>
Eyes.	<p>Wear eye protection device if there is risk of dust exposure. The selection of eye protection depends on the nature of work to be done and if applicable, the type of respirator used. Eye and face protection devices must comply with regulations applicable to the place of use of the product.</p>
Skin.	<p>There are no specific data regarding skin protection with this product. Wear skin protective equipment if necessary. The selection of this equipment depends on the nature of the work involved or if required by the regulations applicable at the place of use of the product. If there is a potential skin contact, consult your supplier for recommendations on the type of gloves suitable.</p>
Other control measures.	<p>Automated systems and use of mechanical equipment is recommended to minimize the risk of exposure by avoiding the presence of operators under normal circumstances. The use of water must be considered in conjunction with the use of mechanical means to reduce the risk of dust disturbance.</p>

SECTION 9 – PHYSICAL AND CHEMICALS PROPERTIES

Melting Point (° C).	> 1500	Specific gravity H ₂ O = 1.	5.0
Vapor pressure (mm Hg).	N.A.	Volatile fraction (% weight).	< 0.03
Vapor density (air=1).	N.A.	Evaporation rate (ether=1).	N.A.
Solubility in water.	Insoluble.		
Physical state.	Fine solid material, color gray/black, without appreciable odor.		
Ingredients (weight %)			
Fe ₂ O ₃	95 – 97	MgO	0.2 – 0.4
SiO ₂	Max. 1.8	TiO ₂	Max. 0.3
Al ₂ O ₃	0.4 – 0.6	MnO	Max. 0.06
CaO	0.3 – 0.8	P ₂ O ₅	Max. 0.02
		Na ₂ O	Max. 0.06
		K ₂ O	Max. 0.04
		S	Max. 0.02

SECTION 10 – STABILITY AND REACTIVITY

Stability.	This product is stable.
Incompatibility.	This product reacts with aluminum, magnesium or hydrazine powder, with ethylene oxide, carbon monoxide and hydrogen peroxide.
Hazardous decomposition products.	Some steam iron oxide can be released during high-temperature melting. Fumes including iron trioxide may be released during certain industrial processes, for example, in foundries and in electric arc welding.
Polymerization.	Can not occur.

SECTION 11 – TOXICOLOGICAL INFORMATION

Inhalation.	Overexposure to iron ore dust may cause possibility siderosis (benign pneumoconiosis resulting from the accumulation of dust or iron smoke in the lungs. This buildup is asymptomatic). Overexposure to particles very thin or fine particles of crystalline silica can cause silicosis.
Contact with skin and eyes.	The product does not cause skin corrosion or damage to eyes.
Carcinogenic effects.	ACGIH rating: Substance not classifiable as carcinogenic to humans (Group A4).
Ingestion and toxicity.	No harmful effects on humans or animals are known.

SECTION 12 – ECOLOGICAL INFORMATION

Iron ore products are insoluble, no harmful effects of toxicity on humans or animals are known. The spill causes physical effects (suspended solids).

Iron ore products are insoluble, so in general (abiotic) degradation is a non-existing process.

Aqueous solubility of iron ore products is so low that the mobility in the soil will not be displayed.

SECTION 13 – DISPOSAL CONSIDERATION

Iron ore products can always be recycled in the process upstream or by a third party. The product can be recovered for re-use, in the event of elimination, do as provided by local, municipal, provincial and federal laws and regulations.

SECTION 14 – TRANSPORT INFORMATION

Iron ore products are not classified as hazardous. Observe the transport of bulk codes in force provided by local, municipal, provincial and federal laws and regulations by type (ship, truck, etc.) carrier.

SECTION 15 – REGULATORY INFORMATION

The production of iron ore and iron oxide pellets is subject to local, municipal, provincial and federal laws and regulations.

Revised Statutes QUEBEC: Law on compensation for victims of asbestosis and silicosis in mines and quarries (L.R.Q., chapter I-7).

Regulations on health and safety (ROHS), occupational exposure limits for air contaminants. Weighted average exposure value (TWA) 5 mg/m³.

SECTION 16 – OTHER INFORMATION

The information herein is based according to the available data and current knowledge but do not constitute guarantees of product properties and do not establish a legally valid contractual relationship. Its content is intended to provide guidance on the appropriate precautions handling and proper use of the product. Although certain hazards are described, we cannot guarantee that there are none others. It is the responsibility of the user to ensure that use of the product is in accordance with local, municipal, provincial and federal laws and regulations. The user is responsible for determining whether the product is suitable for the use intended purposes.

Acronyms and Abbreviations: N.A.: Not applicable.

N.D.: Not available.

ACGIH: American Conference of Governmental Industrial Hygienists.

NIOSH: National Institute for Occupational Safety and Health.

NFPA: National Fire Protection Association.

OSHA: Occupational Safety and Health Administration.

HPR: Hazardous Products Regulations.

REACH: Rules on the Registration, Evaluation, Authorization and Restriction of Chemicals in the regulatory framework of the European Union (EU) on chemical products.

TWA: Total Weighted Average (permissible exposure limit; Occupational Safety and Health Administration).

UN Numbers: Four digits numbers that identify hazardous substances in part of the international transport of UN Committee.

Normand Paradis - Chief, Quality Assurance and Projects

Revision date : 2015/07/31

This page was
intentionally left blank.

Iron Ores, Agglomerates

Jan 2017

1. Identification of the Substance and company

1.1

Other names:	Iron ore pellets, pellet fines,	REACH Registration No.:	01-2119474335-36-0004
EINECS no.:	265-996-8	CAS no.:	65996-65-8

1.2

Iron ore pellets are composed essentially of di-iron trioxide, Fe_2O_3 >90% with toxicologically insignificant amounts of gangue constituents comprised of the silicates and oxides of calcium, silicon, magnesium and aluminium. The product of agglomerating iron ore fines, concentrates and other iron-bearing materials at 1100 to 1300°C. Iron ore pellets are used as a feedstock in blast furnaces and also in other forms of iron production. Pellet fines or chips are the product of screening pellets prior to shipment and are typically used as feedstock for production of iron sinter.

Uses: SU14; PC7, PC19; PROC 2,8b, 14, 22, 26; ERC1 (see section 16 for detailed descriptions)

1.3

Company:	LKAB, Box 952, 971 28 Luleå, Sweden
Telephone:	+46 920 380 00
Normal Hours:	8:00 am to 16:00 pm
Email:	receptionen.koncernkontoret@lkab.com

1.4

Emergency:	+46 970 762 80
------------	----------------

2. Hazards Identification

2.1

Iron ores, agglomerates are inert solids and do not meet the requirements for classification as dangerous under both the EU Dangerous Substances (67/548/EEC) Directive and secondly according to the Classification, Labelling and Packaging of substances and mixtures (CLP) regulations (EC 1272/2008).

The principal risk to human health presented by iron ore agglomerates is dust relating to the concentration of dust in the air acting as a poorly soluble inert nuisance dust. The higher the concentration of dust the greater the risk of irritation to the respiratory system and mechanical irritation to the eyes. Iron oxide pellets may contain respirable crystalline silica (RCS). Experience along with testing shows that in practice no values of RCS content in iron ore agglomerates are found above 0.1%. Concentrations above 1.0% trigger a classification as STOT RE 2 for the silicosis hazard. Therefore this does not trigger a classification for this substance.

2.2

No label required, no signal word required.

2.3

There are no further hazards for the substance iron ore agglomerates.

3. Composition / information on ingredients

3.1

Iron ores, agglomerate composition is usually expressed in terms of its bulk composition the typical range is shown in the table below. It is conventional to represent the bulk composition of oxide materials, such as minerals, ores and refractory products, in terms of the simple oxides of the constituent elements. However, this does not imply that the product is composed of such simple compounds it is simply a convenient means of representing the overall composition of the material. See table below.

Substance	Range (%) by weight	Classification (Dangerous Sub Dir)	Classification (CLP Regs)
Fe ₂ O ₃	>80.0	Not classified	Not classified
Fe	60.0-69.0	Not classified	Not classified
SiO ₂	<10.0	Not classified	Not classified
CaO	<8.0	Not present as CaO so not classified	Not present as CaO so not classified
MgO	<5.0	Not classified	Not classified
Al ₂ O ₃	<3.0	Not classified	Not classified
P	<0.2	Not classified	Not classified
S	<0.1	Not classified	Not classified
Free moisture at 105°C	0-6.0	Not classified	Not classified

4. First aid measures

4.1

Skin contact: None required, just maintain good level of hygiene by washing.

Eye contact: Irritation. Wash the eye with running water for at least ten minutes. Seek medical advice if irritation persists.

Inhalation: Physical irritation. Remove to fresh air.

Ingestion: None required.

4.2

For eye exposure soreness and irritation are the main symptoms. For inhalation coughing is the main symptom. Remove the exposed operator to an area away from high dust levels.

4.3

Not applicable for this substance.

5. Fire fighting measures

Iron ores, agglomerates is non-flammable and has a high melting point of >1000°C.

5.1

Not flammable so not applicable for this substance.

5.2

Not flammable so not applicable for this substance.

5.3

Not flammable so not applicable for this substance.

6. Accidental release measures

Contain and collect any spillage of this solid and return to the suitable storage facility. If the solid is dry and dusty wetting should be used to reduce wind entrainment of dust particles.

7. Handling and Storage

7.1 Handling

Use automated mechanical equipment to handle iron ores, agglomerates so that personal contact is minimised. Minimise generation of dust by using mechanical shovels and equipment instead of handheld tools. Ideally vacuum suction systems / extraction systems should be used to remove dust when cleaning areas of plant. If the environment is dusty then suitable and approved respiratory protection should be worn (see section 8).

7.2 Storage

Generally stored in stockpiles in open air during dry conditions the iron ores, agglomerates may need to be kept damp through water spraying to minimise dust release through wind entrainment. Use of surfactants, wetting agents, etc. are another method of dust suppression. Fixed sided buildings or barriers could also be erected to prevent release of dust. At the blast furnace covered bunkers are the most effective method of storage.

8. Exposure controls and personal protection

8.1 Control parameters (Occupational Exposure Limits (OELs))

Current OELs (GESTIS International Limit Values Institut fuer Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung (IFA))

Country in EU with OEL for the relevant substance	Substance					
	Iron oxide (Fe ₂ O ₃ & FeO)		Dust inhalable		Dust respirable	
	8 hr TWA (mg/m ³)	STEL (mg/m ³)	8 hr TWA (mg/m ³)	STEL (mg/m ³)	8 hr TWA (mg/m ³)	STEL (mg/m ³)
Austria	5.0 (resp)	10.0 (resp)	10.0	20.0	5.0	10.0
Belgium	5.0	---	10.0	---	3.0	---
Denmark	3.5	7.0	10.0	20.0	---	---
France	---	---	10.0	---	5.0	---
Germany (AGS)	---	---	10.0	20.0	3.0	6.0
Germany (DFG)	---	---	4.0	---	1.5	---
Hungary	6.0 (resp)	---	10.0	---	6.0	---
Poland	5.0	10.0	---	---	---	---
Spain	5.0	---	10.0	---	3.0	---
Sweden	3.5	---	10.0	---	5.0	---
United Kingdom	5.0	---	10.0	---	4.0	---
TWA - Time Weighted Average measured over an 8 hour period						
STEL - Short Term Exposure Limit Value – 15 minute duration						
Resp - Respirable fraction of dust						

8.2 Control Measures

Automated systems are recommended to minimise the risk of exposure by avoiding the need for the presence of operators under normal circumstances. The use of mechanical equipment such as vacuum systems or other extraction methods should take precedence over manual work. For large amounts of built up dust the use of machinery, such as a small mobile mechanical shovel units could be used to collect and transport dust to a skip. The use of water suppression should be considered in conjunction with the use of mechanical methods so as to reduce the risk of dust disturbance.

If it is not feasible to use vacuum methods or machinery, then the manual use of shovels should be considered as a last resort to remove settled dust. If there is a risk of disturbing dust and creating high airborne dust concentrations then, as a last resort, the wearing of suitable and approved respiratory protective equipment should be implemented. Ori-nasal respirators fitted with a P3 filter (EN149 : FFP3S) may be used when dust levels are high, the manufacturer's directions for use must be followed at all times to achieve the correct and proper face fit.

Eye protection such as safety glasses / goggles of an approved standard could be used to prevent dust contact with the eyes.

From an environmental perspective, the storage and handling of iron ores, agglomerates can give rise to releases of dust as drift. Airborne dusts may originate from stockpiles and conveyor belts. Dust suppression techniques include the orientation of materials in the direction of the prevailing winds and the use of water sprinkler systems.

9. Physical and chemical properties

Property	Value used
Physical State at 20°C/ 1013 hPa	Solid
Melting point	>1000 °C at 1013 hPa
Boiling point	Not applicable, iron ore agglomerates have a melting point of >300°C
Relative density	5.0 g/cm ³ at 20°C
Vapour pressure	Not applicable for iron ore agglomerates due to high melting point >1000°C
Surface tension	Not applicable, iron ore agglomerates are inorganic solids with very low aqueous solubility
Water solubility	0.05 µg/L at 25 °C, the aqueous solubility of iron ore agglomerates is so low that it does not become bioavailable to humans or ecosystems
Partition coefficient (K _{ow} ⁺)	Not applicable, inorganic
Flash point	Not applicable, iron ore agglomerates are inorganic solids with a melting point >1000°C
Flammability	Non flammable
Explosive properties	Non explosive
Oxidising properties	No
Granulometry	Iron ore agglomerates are produced as a hard agglomerate consisting of spheres of diameter > 8 mm. The substance as used therefore does not contain particles in the inhalable size range. Pellet size is 5.0-20.0mm, Pellet fines size is <10.0mm
Stability in organic solvents	Stable in organic solvents
Dissociation constant	Insoluble
Viscosity	Solid

10. Stability and reactivity

Iron ores, agglomerates are stable and do not react violently or dangerously with other substances under normal conditions.

11. Toxicological information

The main route of exposure to iron ores, agglomerates is via inhalation of the dust which may be produced through abrasion, although oral exposure could also occur. Iron ores, agglomerates are inert solids and not toxic. The principal risk to human health presented by iron ores, agglomerates dust is related to the concentration of dust in the air acting as a nuisance dust. The higher the concentration of dust the greater the risk of irritation to the respiratory system and mechanical irritation to the eyes.

Acute toxicity

Iron oxides are practically insoluble in water and, hence, they will not pass through the skin. The aqueous layer of the skin is not acidic enough to give rise to the formation of iron ions. It has been demonstrated that even at rather low pH levels, the solubility is very low. Without the chemical conversion into soluble iron ions, systemic exposure will be negligible, and toxicologically insignificant.

Certain studies have typically shown that after exposure to iron oxide via inhalation, a recruitment of pulmonary macrophages in the lungs was observed, indicating the activation of the main mechanism for pulmonary clearance of such insoluble particles. Fe_2O_3 particles were observed to be phagocytosed by these macrophages. Such elevations tend to decrease rapidly and usually reach control levels some days post-exposure. According to the authors of several of these studies, the effects are first and foremost non-specific reversible responses to an increased dust burden in the lung, clearly associated with the 'particle effect'. Beck et al. (1982) state 'we do not think the increases seen after exposure to iron oxide in our system are precursors of chronic pulmonary damage, based on both published data on hamsters (Zaidi, 1969) and on our preliminary histopathological examination of lung tissue from exposed hamsters'.

No classification is required for acute toxicity for oral, dermal and inhalation exposure with values of LD50 (oral): 10,000 mg/kg bw and LC50 (inhalation): 2100 mg/m³ air recorded which are far beyond any classification setting.

Skin corrosion / irritation

As iron oxides are practically insoluble in the aqueous layer on the skin, exposure to iron ions will be negligible, which means that irritating effects of dissolved iron can be ruled out. Iron ores, agglomerates along with other iron oxides typically behave as poorly soluble particles and can be seen as not irritating or not corrosive to the skin.

Eye damage / irritation

If any damage to the eye occurs, this would most likely be due to mechanical damage, and thus, not related to the chemical composition of the substance itself. For instance, potential occupational exposure of the eye to this substance is very common in manual work. Iron ores, agglomerates along with other iron oxides typically behave as poorly soluble particles and can be seen as not chemically irritating or not chemically corrosive to the eyes. Irritation or damage can only occur by mechanical means.

Respiratory / Skin sensitisation

Iron ores, agglomerates along with other iron oxides typically behave as poorly soluble particles and can be seen as not sensitising to the respiratory system or the skin. Skin contact with rust, which can contain several kinds of iron oxides, has been very common since time immemorial in everyday life of humans. However, skin sensitisation owing to dermal contact with rust has not been reported in literature as a recognised problem. Moreover, as iron oxides are practically insoluble in the aqueous layer of the skin, exposure to iron ions will be negligible, which means that skin sensitisation by dissolved iron can be ruled out.

Germ cell mutagenicity

Owing to the lack of solubility of iron oxides, genetic toxicity is not expected, unless the particles are phagocytosed by the cells. This can be ruled out in the case of bacterial assays (Ames test), since phagocytosis does not occur. Regarding the mammalian cell mutagenicity, Fe_3O_4 particles were indeed observed within the cell in the chromosome aberration test but still, no mutagenic response was exerted. The aforementioned result can also be expected when other iron oxide particles are tested. Particle size is a determinative factor; large iron oxide particles, produced by abrasive techniques, will not enter the mammalian cell and thus iron ores, agglomerates should not be seen as a mutagenic substance.

Carcinogenicity

The assessment of cancer risk due to pure exposure to iron oxides alone is difficult, since most industrial activities which may give rise to iron oxide exposure generate mixed exposures containing several different chemicals and dusts, or radiation. While excess risks of lung cancers have been reported in epidemiological studies of iron ore miners, foundry workers, steel workers and welders, industrial settings where exposure to iron oxides were involved, the majority of the studies were not able (or did not intend) to separate iron oxide exposure from other exposures to known or suspected carcinogens often present at the same settings or same workplaces.

Four epidemiological studies of good quality have been conducted, which either tried to separate iron oxide exposure from other exposures (Moulin et al. 2000 and Bourgard et al. 2009 in the iron and steel industry) or which have been conducted under circumstances in which only low levels of exposure to other agents were present (Axelson et al. 1979 among workers exposed to iron oxide during production of sulphuric acid from pyrite and Lawler et al. 1985 among iron-ore miners). These studies, specifically addressing the affect of iron oxide on lung cancer, did not show any risk of lung cancer associated with exposure to iron oxides.

Institutions like IARC (1987) or ACGIH (2006) have reviewed the available information regarding the carcinogenicity of iron oxides and found iron oxides not to be a carcinogen.

Reproductive toxicity

No evidence of any effects. Human exposure to iron oxides occurs via skin contact with large solid objects, or via the inhalation or ingestion (primary or secondary) of small particles (dusts). Based on the physico-chemical properties of iron oxides, any significant systemic exposure upon skin contact can be deemed unlikely. With respect to the oral and inhalation (particles are ingested after clearance from the respiratory tract) route, after ingestion (primary or secondary), the oxides will not be dissolved in the gastric juice due to their physicochemical properties; they will be efficiently eliminated as such via the faeces. Therefore, systemic exposure will not occur to any significant extent.

Repeated dose toxicity - Inhalation

Results of inhalation studies clearly show the iron oxide particles to behave as poorly soluble particles. This together with the lack of bioavailability after oral exposure and dermal exposure signifies that no classification for repeated-dose toxicity is necessary.

However repeated high exposures to iron oxide over long periods of time could possibly cause a benign pneumoconiosis known as siderosis. This condition is not thought to cause any impairment of lung morphology, functions or symptoms. Therefore the conditions occurring after the prolonged inhalation high levels of iron or iron compounds as placed on the market do not meet the criteria for classification as dangerous under CLP (Iron Platform Position paper *TWG65 - Siderosis Position Paper100125*).

12. Ecological information

12.1 Toxicity

Iron in massive form and sparingly soluble forms of iron are highly insoluble and non-hazardous. Literary studies have extensively used test solutions with iron concentrations above that of its solubility limit. Due to the physical effects of precipitated material some of these studies are meaningless for the investigation of intrinsic toxicity. Iron ions released to surface waters quickly form insoluble iron hydroxides in mixing zones. These positively charged iron (III) colloids will react with the negatively charged mucus that lines the fish gill. This accumulation of iron on fish gills results in physical effects. In ambient conditions, dissolved natural background concentrations of iron, are generally at equilibrium therefore an addition of iron would lead to the precipitation of iron compounds from solution and are therefore not intrinsically toxic (Jackson, Versfeld & Adams 2010, Peters, Brown & Merrington 2010).

Iron is amongst the most common elements in the earth's crust and can be found in great abundance in both the terrestrial and sediment environment. The relative contributions of anthropogenic iron to the existing natural pools of iron in soils and sediments is therefore not relevant, neither in terms of added amounts, nor in terms of toxicity (Vangheluwe, Vercaigne, Vandenbroele, Heijerick & Shtiza 2010).

Avian toxicity data are used in the assessment of secondary poisoning risks for the aquatic and terrestrial food chains where iron is an essential trace element, well regulated in all living organisms. Differences in iron uptake rates are related to essential needs, varying with the species, size, life stage, seasons etc. Iron homeostatic mechanisms are applicable across species with specific processes being active depending on the species, life stages, etc. The available evidence shows the absence of iron biomagnification across the trophic chain both in the aquatic and terrestrial food chains. The existing information suggests not only that iron does not biomagnify, but rather that it tends to exhibit biodilution. Differences in sensitivity among species are not related to the level in the trophic chain, but to the capability of internal homeostasis and detoxification (Vangheluwe and Nederkassel 2010).

12.2 Persistence and Degradability

Iron ores, agglomerates are highly insoluble, so in general (abiotic) degradation is an irrelevant process for inorganic substances that are assessed on an elemental basis.

12.3 Bioaccumulative potential

Iron is an essential trace element, well regulated in all living organisms. The available evidence shows the absence of iron biomagnification across the trophic chain, both in the aquatic and terrestrial food chains. The existing information suggests not only that iron does not biomagnify, but rather that it tends to exhibit biodilution (Jackson, Versfeld, Adams 2010 & Vangheluwe & Nederkassel 2010).

12.4 Mobility in soil

Iron in massive form and iron oxides are highly insoluble and non-hazardous and therefore demonstrate that the aqueous solubility of iron ores, agglomerates is so low that it does not become bioavailable to ecosystems and will not show mobility in the soil.

12.5 Results of PBT and vPvB assessment

Iron ores, agglomerates are not bio-available, owing to extreme insolubility in water, are not systemically available or bio-accumulative and hence do not fulfil either of the PBT and vPvB criteria for classification.

13. Disposal considerations

Iron ores, agglomerates should always be recycled. If iron ore agglomerates are not fed into a blast furnace or other similar iron / steel making systems they should be recycled back into the process by either the producer or by another company.

14. Transport information

Iron ore agglomerates are not classified as dangerous under CLP or Dangerous Substances Directive for transport so there is no requirement for transport information. All subheadings in this section are not applicable for iron ores, agglomerates.

15. Regulatory information

15.1

Iron ores, agglomerates are not covered by any other local or national legislation in relation to their intrinsic properties, but differences at national level may apply and this should be taken into account. The process of iron ore pellet production including its emissions is covered by the European Commission document "*Integrated Pollution Prevention and Control Reference Document on Best Available Techniques for the Iron and Steel Production Draft 2001*" (Iron and Steel BREF current standard 2001). This safety data sheet does not cover these types of emission and the BREF document should be used in this case. Occupational exposure limits (OELs) set by each member state and are covered by their own policy and legislation where this exists. There are no Authorisations and Restrictions on use under REACH for the substance iron ores, agglomerates.

15.2

A Chemical Safety Assessment has not been carried out as iron ores, agglomerates do not meet the requirements for being classified as dangerous.

16. Other Information

Revision

This safety data sheet has been produced / revised in line with Annex II of the REACH Regulations (2010). Information in this safety data sheet was collected and used where necessary from the work done to produce a REACH Registration dossier and Chemical Safety Report for iron ores, agglomerates. This revision is the current version dated **December 2010**

Previous Versions: *Month - year*

Abbreviations / Acronyms of significance

ERC1	Manufacture of substances
LD50	Median lethal dose, causing 50% lethality
LC50	Median lethal concentration, causing 50% lethality
PC7	Base metals and alloys
PC19	Intermediate
PROC 2	Use in closed process, no likelihood of exposure - Continuous process but where the design philosophy is not specifically aimed at minimizing emissions. It is not high integrity and occasional expose will arise e.g. through maintenance, sampling and equipment break-ins
PROC8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
PROC14	Production of preparations or articles by tableting, compression, extrusion, pelettisation
PROC22	Potentially closed operations with minerals/metals at elevated temperature - Activities at smelters, furnaces, refineries, coke ovens. Exposure related to dust / fumes to be expected. Emission of direct cooling may be relevant
PROC26	Handling of solid inorganic substances at ambient temperature - Transfer / handling of ores, concentrates, raw metal oxides and scrap; packaging, un-packaging, mixing/blending, weighing of metal powders and other minerals
SU14	Manufacture of basic metals

Risk and Safety Phrases according to (67/548/EEC):

Iron ores, agglomerates are not classified as dangerous and do not have any R and S phrases assigned.

Hazard and Precautionary Statements according to CLP Regulations (EC)1272/2008):

Iron ores, agglomerates are not classified as dangerous and do not have any H and P statements assigned.

References

- ACGIH (2006). Iron oxide. ACGIH. Documentation of the threshold limit values and biological exposure indices Vol:7th Ed (2006).
 Axelson O, Sjoberg A. (1979). Cancer incidence and exposure to iron oxide dust. J Occup Med 21(6):419-422.
 Beck BD, Brain JD, and Bohannon DE. (1982). An in vivo hamster bioassay to assess the toxicity of particulates for the lungs. Toxicology and Applied Pharmacology, 66: 9-29.
 Bourgard E, Wild P, Courcot B, Diss M, Ettliger J, Goutet P, Hemon D, Marquis N, Mur JM, Rigal C, Rohn-Janssens MP, Moulin JJ. (2009). Lung cancer mortality and iron oxide exposure in a French steel-producing factory. Occup Environ Med 66 (3):175-81.
 DFG (1984). Eisenoxid. Deutsche Forschungsgemeinschaft: toxikologisch-arbeitsmedizinische Begründung von MAK-Werten.
 European Commission document "Integrated Pollution Prevention and Control Reference Document on Best Available Techniques for the Iron and Steel Production Draft April 2010" (Iron and Steel BREF current version 2001)
 GESTIS International Limit Values Institut fuer Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung (IFA) – website: http://bgi-online.hvbg.de/LIMITVALUE/WebForm_gw.aspx
 IARC (1987a). Haematite & iron oxide. IARC Monographs An Updating of IARC Monographs Volumes 1 to 42. Supplement 7 p.216.
 IARC (1987b). Iron & steel founding. IARC Monographs. An Updating of IARC Monographs Volumes 1 to 42. Supplement 7 p.224.
 Iron Platform Technical Working Group (2010b). Does the occurrence of siderosis or pulmonary fibrosis after prolonged exposure of workers to iron or iron compounds require these substances to be classified as causing specific target organ toxicity (STOT) under CLP? *TWG65 - Siderosis Position Paper100125*, Owner company: The Iron Platform.
 Jackson K., Versfeld R., Adams W. (Iron Platform). 2010. Position Paper – Predicted No Effect Concentration. Iron Platform, UK.
 Lawler AB, Mandel JS, Schuman LM, Lubin JH (1985). A retrospective cohort mortality study of iron ore (hematite) miners in Minnesota. J Occup Med 27(7):507-517.
 Moulin JJ, Clavel T, Roy D, Dananche B, Marquis N, Fevotte J, Fontana JM. (2000). Risk of lung cancer in workers producing stainless steel and metallic alloys. Int Arch Occup Environ Health 73(3):171-180.
 Peters A., Brown B., Merrington G. 2010. Background Paper on Iron in the Aquatic Environment. WCA Environment, UK.
 Vangheluwe M. & Nederkassel J. van (Arche). 2010. White Paper on waiving for secondary poisoning for Fe and Al compounds – Final report. ARCHE, Belgium.
 Vangheluwe M., Vercaigne I., Vandenbroele M., Heijerick D. (ARCHE) & Shtiza A. (ARCADIS). 2010. White Paper on exposure based waiving for iron and aluminium in soil and sediments - Final report. ARCHE, Belgium.

Disclaimer

The information, specifications, procedures, and recommendations herein are presented in good faith and are believed to be accurate and reliable at the date of issue. Where information is taken from supplied items it is the responsibility of the supplier to ensure the accuracy of the data. The Individual authors of this safety sheet are deemed to be appropriately competent. This safety data sheet template was constructed under the requirements of the REACH regulations ((EC) No 1907/2006) using the guidance provided as to the format and information necessary. Occupational exposure limits (OEL) used in this safety data sheet template will be EU OELs and where these limits do not exist appropriate member state OELs will be the reference limit. No liability can be accepted with regard to the handling, processing or use of the product concerned which, in all cases, shall be in accordance with appropriate regulations and or legislation. Company name gives no warranty or representation as to the accuracy of the information or for the guidance being for, or suitable for, a specific purpose. All implied warranties and conditions are excluded, to the maximum extent permitted by law. Use of this document by any third party is at your own risk. Save to the extent that liability cannot be excluded by law, Company name is in no way responsible or liable for any damage or loss whatsoever arising from the use of or reliance on the information and guidance contained in this document.



SAFETY DATA SHEET

Iron Ores, Agglomerates

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 & 453/2010 (CLP)

Version 2

Revision date: 07/11/2012

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Chemical Name	Iron ores, Agglomerates
Trade name	Iron ores, Agglomerates
CAS No.	65996-65-8
EINECS No.	265-996-3
REACH Registration No.	01-2119474XXX-36-0009

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified use(s) Iron ore pellets are used as a feedstock in blast furnaces and also in other iron production. Pellet fines or chips are the product of screening pellets prior to shipment and are typically used as feedstock for production of iron sinter. Uses: SU14; PC7, PC19; PROC 2,8b, 14, 22, 26; ERC1 (see Annex 1 for detailed descriptions)

Uses advised against Those not included in Annex 1

1.3 Details of the supplier of the Safety Data Sheet

Company Identification	VALE S.A. Av. Dante Micheline, 5500 Ponta de Tubarão Vitória/ES - Brasil CEP. 29090-900
Telephone no	Francisco Macedo: 55-27-3333-6648
Mobile:	55-27-88177659
EU Only Representative	Vale Europe Limited Acton Refinery Bashley Road London NW10 6SN United Kingdom
Tel	Mike Shepherd 44(0)20 8453 9208
e mail	REACH@vale.com

1.4 Emergency telephone number

112 (24/7)
REACH@vale.com
Mike Shepherd 44(0)20 8453 9208

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the substance

Not classified as hazardous

2.2 Other hazards

Generation of dust can cause irritation to the respiratory system and mechanical irritation to the eyes. Iron oxide pellets may contain respirable crystalline silica (RCS). Experience along with testing shows that in practice no values of RCS content in iron ore agglomerates are found above 0.1%. Concentrations above 1.0% trigger a STOT RE 2

classification for the silicosis hazard. Therefore this substance is not classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Composition	%w/w
Di-iron trioxide (Fe ₂ O ₃)	>80.0
Iron (Fe)	60.0-69.0

Substance and impurities are non hazardous

3.2 Mixtures. Not applicable

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation	Move person into fresh air. If not breathing, give artificial respiration
Skin Contact	The general hygiene measures for chemical products handling are applicable
Eye Contact	Wash the eye with running water for at least ten minutes. Seek medical advice if irritation persists.
Ingestion	Never administer anything by mouth to an unconscious person. In case of ingestion, rinse mouth with water (only if conscious).

4.2 **Principal symptoms and effects, both acute and delayed** For eye exposure, soreness and irritation are the main symptoms. For inhalation, coughing is the main symptom. Remove the exposed operator to an area away from high dust levels.

4.3 **Indication of immediate medical attention and special treatment needed** Not applicable

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media	
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	None known
5.2 Special hazards arising from the substance or mixture	Non-flammable
5.3 Advice for fire-fighters	Fire fighters should wear complete protective clothing including self-contained breathing apparatus

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures	Avoid dust formation. Contain and collect any spillage of this solid and return to a suitable storage facility. If the solid is dry and dusty wet with water to prevent wind dispersion and dust explosions.
6.2 Environmental precautions	Keep away from water courses
6.3 Methods and material for containment and cleaning up	Keep in closed containers for disposal. Vacuum or sweep up, transfer to a container, seal ready for disposal. Wet the material with water to limit dust emission or explosion.
6.4 Reference to other sections	Section 8

SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling** Use automated mechanical equipment to handle iron ore agglomerates, so that personal contact is minimized. Collect mechanically and dispose of according to the instructions in Section 13. Avoid dust generation. Use a vacuum to collect material spilled, where feasible. Wear appropriate respirator if exposure to high levels of product is likely.
- 7.2 Conditions for safe storage, including any incompatibilities** Generally stored in stockpiles in open air. During dry conditions, the iron ores, agglomerates may need to be kept damp through water spraying to minimise dust release through wind scattering. Use of surfactants, wetting agents, etc. are another method of dust suppression. Fixed sided buildings or barriers could also be erected to separate stocks and prevent release of dust. At the blast furnace, covered bunkers are the most effective method of storage.
- Storage temperature: Ambient
 Storage life: Not applicable
 Incompatible materials: Acids, strong oxidizing agents, halogens, phosphorus

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters**
8.1.1 Occupational Exposure Limits

Country in EU with OEL for the relevant substance	Substance					
	Iron oxide (Fe ₂ O ₃ & FeO)		Dust inhalable		Dust respirable	
	8 hr TWA (mg/m ³)	STEL (mg/m ³)	8 hr TWA (mg/m ³)	STEL (mg/m ³)	8 hr TWA (mg/m ³)	STEL (mg/m ³)
Austria	5.0 (resp)	10.0 (resp)	10.0	20.0	5.0	10.0
Belgium	5.0	---	10.0	---	3.0	---
Denmark	3.5	7.0	10.0	20.0	---	---
France	---	---	10.0	---	5.0	---
Germany (AGS)	---	---	10.0	20.0	3.0	6.0
Germany (DFG)	---	---	4.0	---	1.5	---
Hungary	6.0 (resp)	---	10.0	---	6.0	---
Poland	5.0	10.0	---	---	---	---
Spain	5.0	---	10.0	---	3.0	---
Sweden	3.5	---	10.0	---	5.0	---
United Kingdom	5.0	---	10.0	---	4.0	---

TWA - Time Weighted Average measured over an 8 hour period
 STEL - Short Term Exposure Limit Value – 15 minute duration
 Resp - Respirable fraction of dust
 AGS - Ausschuss für Gefahrstoffe
 DFG- Deutsche Forschungsgemeinschaft

- 8.1.2 Biological limit values** None assigned.
8.2 PNECs and DNELs

DNEL	Oral	Inhalation	Dermal
Long term local workers	Not calculated	3 mg/m ³ for the respirable fraction and 10 mg/m ³ for the inhalable fraction.	Not calculated
Long-term systemic general population	Not calculated	3 mg/m ³ for the respirable fraction and 10 mg/m ³ for the inhalable fraction. 5 mg/m ³ for the respirable airborne fraction and 5 mg/m ³ for inhalable airborne	Not calculated

		fraction.	
Long-term local general population	Not calculated	1.5 mg/m ³ for the respirable airborne fraction and 5 mg/m ³ for inhalable airborne fraction.	Not calculated
PNECs		Not calculated- substance is not soluble in water	

8.3 Exposure controls

8.3.1 Appropriate engineering controls

Automated systems are recommended to minimise the risk of exposure. For large amounts of built up dust the use of machinery, such as a small mobile mechanical shovel units could be used to collect and transport dust to a skip. The use of water suppression should be considered in conjunction with the use of mechanical methods so as to reduce the risk of dust disturbance.

8.3.2 Personal protection equipment

Eye/face protection



Wear eye protection such as safety glasses / goggles of an approved standard to prevent dust contact with the eyes.

Skin protection (Hand protection/ Other)



For prolonged or repeated contact use protective gloves.

Respiratory protection



Respiratory protection is normally not required. Where protection from nuisance levels of dusts is desired, use Ori-nasal respirators fitted with a P3 filter (EN149: FFP3S). The manufacturer's directions for use must be followed at all times to achieve the correct and proper face fit.

8.3.3 Environmental Exposure Controls

From an environmental perspective, the storage and handling of iron ores, agglomerates can give rise to releases of dust as drift. Airborne dusts may originate from stockpiles and conveyor belts. Dust suppression techniques include the placing of the substance in the direction of the prevailing winds and the use of water.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Solid
Colour	
Odour	None
Melting point at 1013 hPa	>1000 °C
Boiling point	Not applicable
Flash point (°C)	Not applicable
Flammability	Non flammable
Explosive limit ranges.	Not applicable
Vapour pressure	Not applicable
Relative density g/ml at 20°C	5.0 g/cm ³
Solubility (Water) at 25 °C	0.05 µg/L
Solubility (Other)	Stable in organic solvents
Partition coefficient (n-Octanol/water)	Not applicable
Auto ignition temperature	Not applicable
Viscosity	Not applicable
Explosive properties	Non explosive

9.2	Oxidising properties	Not applicable
	Other information	Not known

SECTION 10: STABILITY AND REACTIVITY

10.1	Reactivity	Not highly reactive
10.2	Chemical stability	Iron ores, agglomerates are stable and do not react violently or dangerously with other substances under normal conditions
10.3	Possibility of hazardous reactions	Not known
10.4	Conditions to avoid	Not known
10.5	Incompatible materials	Acids, oxygen, strong oxidizing agents, halogens, phosphorus
10.6	Hazardous decomposition product(s)	Not known

SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Information on toxicological effects	
11.1.1	Substances	
	Ingestion Acute LD ₅₀	10,000 mg/kg bw
	Dermal Acute LD ₅₀	Not known
	Inhalation Acute LC ₅₀	2,100 mg/m ³
	Skin corrosion/irritation	Not irritating
	Eye damage/irritation	Irritation or damage can only occur by mechanical means.
	Respiratory or skin sensitisation	Not a sensitiser
	Mutagenicity	No evidence of mutagenicity
	Carcinogenicity	No evidence of carcinogenicity
	Reproductive toxicity	No evidence of reproductive toxicity
	STOT- single exposure	Not known
	Aspiration hazard	Not known
11.2	Other information	Not known

SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Not applicable, substance is insoluble
12.2	Persistence and degradability	Inorganic and highly insoluble
12.3	Bioaccumulative potential	Information suggests that iron does not biomagnify, but tends to exhibit biodilution.
12.4	Mobility in soil	Not mobile
12.5	Results of PBT and vPvB assessment	Not a PBT or vPvB
12.6	Other adverse effects	Not known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Should always be reused or recycled.
13.2	Additional Information	Not known

SECTION 14: TRANSPORT INFORMATION

14.1	Land transport (ADR/RID)	Not classified
	Road/Rail (ADR/RID)	Not classified
	Class/Packing Group	Not classified
14.2	IMDG Class	Not classified
14.3	ICAO/IATA Class	Not classified
14.4	Transport in bulk according to	Not classified



Annex II of MARPOL73/78 and
the IBC Code

SECTION 15: REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture substance or mixture
- 15.1.1 EU regulations Users to follow EU directives and regulations
Authorisations and/or restrictions on use Not applicable
- 15.1.2 National regulations Users to follow national laws and regulations
- 15.2 Chemical Safety Assessment A Chemical Safety Assessment has not been carried out as iron ores, agglomerates do not meet the requirements for being classified as dangerous.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Sections 1.3 and 1.4

Legend

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
STOT	Specific Target Organ Toxicity
DNEL	Derived No Effect Level
PNEL	Predicted No Effect Concentration
CAS	Chemical Abstracts Service
EINECS	European Inventory of Existing Commercial chemical Substances

References

Regulation (EC) No. 1272/2008 & 453/2010 (CLP)
Directive 67/548/EEC & Directive 1999/45/EC
Chemical Safety Report for Iron Ores, Agglomerates

Risk and Safety phrases Not classified

Hazard and Precautionary statements Not classified

Training advice Ensure staff and workers receive adequate training with regular updates in the handling of chemicals

Additional Information: Not known

Disclaimer

The information, specifications, procedures, and recommendations herein are presented in good faith and are believed to be accurate and reliable at the date of issue. Where information is taken from supplied items it is the responsibility of the supplier to ensure the accuracy of the data. The Individual authors of this safety sheet are deemed to be appropriately competent. This safety data sheet template was constructed under the requirements of the REACH regulations ((EC) No 1907/2006) using the guidance provided as to the format and information necessary. Occupational exposure limits (OEL) used in this safety data sheet template will be EU OELs and where these limits do not exist appropriate member state OELs will be the reference limit. No liability can be accepted with regard to the handling, processing or use of the product concerned which, in all cases, shall be in accordance with appropriate regulations and or legislation. Company gives no warranty or representation as to the accuracy of the information or for the guidance being for, or suitable for, a specific purpose. All implied warranties and conditions are excluded, to the maximum extent permitted by law. Use of this document by any third party is at your own risk. Save to the extent that liability cannot be excluded by law, Company is in no way responsible or liable for any damage or loss whatsoever arising from the use of or reliance on the information and guidance contained in this document.

Sector Use (SU)	Preparation Category (PC)	Process category (PROC)	Env Release Categories (ERC)	Operational conditions	Physical form of exposure	Route of exposure
SU14: Manufacture of basic metals	PC7: Base metals and Alloys PC19 - Intermediate	PROC 2 PROC 8b PROC 14 PROC 22 PROC 26	ERC1: Manufacture of substances	Large volume continuous 24 hours / day Temperature: ambient to 1500°C Semi closed system Semi automated operation Transported via conveyor and bunkers	Dust	Human - Inhalation Environment Water (waste stream) Air

Annex 1 Use descriptors

PROC 2 - Use in closed process, no likelihood of exposure

PROC 8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities

PROC 14 - Production of preparations or articles by tableting, compression, extrusion, pelettisation

PROC 22 - Potentially closed operations with minerals/metals at elevated temperature

PROC 26 - Handling of solid inorganic substances at ambient temperature of metal powders and other minerals

This page was
intentionally left blank.



Iron Ore Company of Canada

Material Safety Data Sheet

Standard Acid Pellet

Company: Iron Ore Company of Canada
Address: P.O. Box 1000
Labrador City, NL
A2V 2L8
Telephone: (709) 944 8400, ext 8830
Contact: Terrielynn Foster
Date Revised: January 31, 2012
Product Name: Standard Acid Pellet
Chemical Name: Iron oxide (major constituent Fe_2O_3)
Use: Used as iron bearing burden in iron blast furnace.
U.N. Number: Not Regulated
Dangerous Goods This product is classified as part of group C in the code of safe Practice for Solid Bulk Cargoes (BC Code)

Class & Subsidiary Risk: Not Regulated
Hazchem Code: Not Regulated
Poisons Schedule: Not Regulated

Physical Description & Properties

Appearance Grey to red coloured round pellet, between 6.3 mm and 19 mm diameter
Boiling Point 3000° (C) for Hematite (Ferric oxide)
Vapour Pressure N/A
Percent Volatiles N/A
Specific Gravity 3.96
Flash Point N/A
Flammability Limits N/A
Autoignition Temperature N/A
Other Properties Insoluble in water; slight weathering may occur



Hazardous Ingredients

Ingredients	Chemical Name	%	CAS Number	Exposure limit ACGIH
Total Fe	Fe	93.1	1309-37-1	5 mg/m ³
Silica	SiO ₂	4.75	7631-86-9	0.025 mg/m ³
Calcium Oxide	CaO	1.00	1305-78-8	2 mg/m ³
Magnesium Oxide	MgO	0.35	1309-48-4	10 mg/m ³
Aluminum Oxide	Al ₂ O ₃	0.40	1344-28-1	
Manganese	Mn	0.12	7439-96-5	0.2mg/m ³
Minor Constituents		<0.60		

Health Effects (Acute):

- Ingestion** Quartz is probably not toxic following short-term ingestion. There is no human or animal information available. Ingestion is not a typical route of occupational exposure.
- Eye** In general, the dust is not expected to be irritating except as a "foreign object". Some tearing, blinking and mild temporary pain may occur as the solid material is rinsed from the eye by tears.
- Skin** In general, quartz dust is not expected to be irritating to the skin
- Inhalation** In general, high concentrations of dust may cause coughing and mild, temporary irritation, following a short-term exposure. The ACGIH lists Quartz as a suspected human carcinogen. Quartz can have potentially serious respiratory effects following long-term inhalation (one year or more) or a high one time exposure.

Health Effects (Chronic):

- Inhalation** Prolonged or repeated exposure to high levels of fine airborne crystalline silica dust may cause severe scarring of the lungs, a disease called silicosis. The risk of developing and the severity of silicosis depends on the airborne concentration of respirable-size silica dust to which an employee is exposed and the duration of exposure.



Inhalation of quartz has also been associated with a number of other, less well characterized, harmful effects including effects on the kidney, the liver, the spleen and immune system disorders.

Prolonged or repeated inhalation to high levels of inhalable iron ore particles may result in pneumoconiosis (lung disease)

Carcinogenicity

The International Agency for Research on Cancer (IARC) has concluded in *Vol. 68, IARC Monographs on the Evaluation of Carcinogenic Risks to Humans and their Supplements: A complete list: 1997*, that crystalline silica in the form of quartz or cristobalite from occupational resources should be classified as carcinogenic to humans (Class 1). It has been upgraded from its previous classification as probably carcinogenic to humans (Class 2A). This conclusion was drawn on the basis of a relatively large number of human population studies that together provided sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz or cristobalite. In many (although not all) of these studies, lung cancer risk were elevated and could not be explained by other factors. Recent reviews have tended to conclude that if exposures are controlled to prevent silicosis, they will probably also prevent lung cancer. Ferric oxide isn't classed as a carcinogen.

Teratogenicity & Embryotoxicity

There is no human or animal information available.

Reproductive Toxicity

There is no human or animal information available

Mutagenicity

There is insufficient information available

Toxicologically Synergistic

There is disagreement about whether tobacco smoke increases the severity of the effect of silica dust on respiratory impairment. Simultaneous exposure to known carcinogens can increase the carcinogenicity of crystalline silica. A synergistic effect between smoking and crystalline silica on silicosis or risk of lung cancer is also possible.

First Aid:

Ingestion

Health effects are not expected. If irritation or discomfort occurs, obtain medical advice.

Eye

Flush dust particles from the eye with luke-warm water for 5 minutes or until particle/dust is removed. If irritation persists, seek medical attention.

Skin

Health effects are not expected. If irritation does occur, flush with luke-warm, gently flowing water for 5 minutes or until it is removed.



01110101

Iron Ore Company of Canada

Material Safety Data Sheet

DIRECT REDUCTION PELLETS (DR)

Company:	Iron Ore Company of Canada
Address:	P.O. Box 1000 Labrador City, NL A2V 2L8
Telephone:	(709) 944 8400, ext 8830
Contact:	Terrielynn Foster
Date Revised:	January 31, 2012
Product Name:	Direct Reduction Pellets (DR)
Chemical Name:	Iron oxide (major constituent Fe_2O_3)
Use:	Used as feedstock in direct reduction process.
U.N. Number:	Not Regulated
Dangerous Goods	This product is classified as part of group C in the code of safe Practice for Solid Bulk Cargoes (BC Code)
Class & Subsidiary Risk:	Not Regulated
Hazchem Code:	Not Regulated
Poisons Schedule:	Not Regulated
Physical Description & Properties	
Appearance	Grey to red coloured pellet, between 6.3 mm and 19 mm in diameter.
Boiling Point	3000° (C) for Hematite (Ferric oxide)
Vapour Pressure	N/A
Percent Volatiles	N/A
Specific Gravity	3.96
Flash Point	N/A
Flammability Limits	N/A
Autoignition Temperature	N/A
Other Properties	Insoluble in water. Slight weathering may occur.



Hazardous Ingredients

Ingredients	Chemical Name	%	CAS Number	Exposure limit ACGIH
Total Fe	Fe	96.8	1309-37-1	5 mg/m ³
Silica	SiO ₂	1.20	7631-86-9	0.025 mg/m ³
Calcium Oxide	CaO	0.70	1305-78-8	2 mg/m ³
Magnesium Oxide	MgO	0.50	1309-48-4	10 mg/m ³
Aluminum Oxide	Al ₂ O ₃	0.45	1344-28-1	
Manganese	Mn	0.12	7439-96-5	0.2mg/m ³
Minor Constituents		<0.50		

Health Effects (Acute):

- Ingestion Quartz is probably not toxic following short-term ingestion. There is no human or animal information available. Ingestion is not a typical route of occupational exposure.
- Eye In general, the dust is not expected to be irritating except as a "foreign object". Some tearing, blinking and mild temporary pain may occur as the solid material is rinsed from the eye by tears.
- Skin In general, quartz dust is not expected to be irritating to the skin
- Inhalation In general, high concentrations of dust may cause coughing and mild, temporary irritation, following a short-term exposure. The ACGIH lists Quartz as a suspected human carcinogen. Quartz can have potentially serious respiratory effects following long-term inhalation (one year or more) or from a high one time exposure.

Health Effects (Chronic):

- Inhalation Prolonged or repeated exposure to high levels of fine airborne crystalline silica dust may cause severe scarring of the lungs, a disease called silicosis. The risk of developing and the severity of silicosis depends on the airborne concentration of respirable size silica dust to which and employee is exposed and the duration of exposure



Inhalation of quartz has also been associated with a number of other, less well characterized, harmful effects including effects on the kidney, the liver, the spleen and immune system disorders.

Prolonged or repeated inhalation to high levels of inhalable iron ore particles may result in pneumoconiosis (lung disease)

Carcinogenicity

The International Agency for Research on Cancer (IARC) has concluded in *Vol. 68, IARC Monographs on the Evaluation of Carcinogenic Risks to Humans and their Supplements: A complete list: 1997*, that crystalline silica in the form of quartz or cristobalite from occupational resources should be classified as carcinogenic to humans (Class 1). It has been upgraded from its previous classification as probably carcinogenic to humans (Class 2A). This conclusion was drawn on the basis of a relatively large number of human population studies that together provided sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz or cristobalite. In many (although not all) of these studies, lung cancer risk were elevated and could not be explained by other factors. Recent reviews have tended to conclude that if exposures are controlled to prevent silicosis, they will probably also prevent lung cancer. Ferric oxide isn't classed as a carcinogen.

Teratogenicity & Embryotoxicity

There is no human or animal information available.

Reproductive Toxicity

There is no human or animal information available

Mutagenicity

There is insufficient information available.

Toxicologically Synergistic

There is disagreement about whether tobacco smoke increases the severity of the effect of silica dust on respiratory impairment. Simultaneous exposure to known carcinogens can increase the carcinogenicity of crystalline silica. A synergistic effect between smoking and crystalline silica on silicosis or risk of lung cancer is also possible.

First Aid:

Ingestion

Health effects are not expected. If irritation or discomfort occurs, obtain medical advice.

Eye

Flush dust particles from the eye with luke-warm water for 5 minutes or until particle/dust is removed. If irritation persists, seek medical attention.

Skin

Health effects are not expected. If irritation does occur, flush with luke-warm, gently flowing water for 5 minutes or until it is removed.

Product



Inhalation: If high airborne concentrations are present, take the proper precautions to ensure your own safety before attempting rescue (e.g. wear appropriate personal protective equipment). If symptoms are experienced, remove source of contamination or have victim move to the fresh air. Obtain medical advice.

Advice to Doctors: Jurisdictions, which have specific regulations for crystalline silica also require medical surveillance programs. Since there may be some variation in requirements specific information should be sought from the appropriate government agency in each jurisdiction.

Ventilation: Ensure adequate ventilation to keep dust below TLV. This is dependent on size of the work area. Local exhaust, mechanical (general), and other controls should be adequate to ensure that the employee exposure to respirable silica and dust does not exceed the recommended standards.

Personal Protection: Protective filter masks (NIOSH Approved) should be worn for exposure.

Flammability: N/A

Storage & Transport: No special precautions other than weight and stability considerations.

Spills & Disposal: No special precautions other than possible slip hazard due to spherical shape. Product should be salvaged for use; clean-up with tractors or shovels as deemed appropriate.

Fire/Explosion Hazards: None

Safety Data Sheet: SDS

SECTION 1: Identification

Date drawn up: June 02, 2012
Date of latest revision: November 22, 2016
Version number: 2.1

1.1. Product identifier

Product Name: HBI

Brand name: HBI – Hot Briquetted Iron¹
Chemical Name: Iron
Product Use: Iron and Steel Production

Company: voestalpine Texas LLC
2800 Kay Bailey Hutchison Road
Portland, TX 78374, USA
Phone: (361) 704 - 9000
Fax: 361 704-9090

Website: voestalpine.com/Texas

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

This substance is not classified dangerous in the meaning of the European 67/548EEC Directive and the Regulation (EC) No. 1272/2008. Material Hazardous only in Bulk (MHB) as per IMO IMSBC Code.

2.2. Effects on Human Health:

The principal risk to human health presented by *iron* dust is directly related to the concentration of dust in the air acting as a nuisance dust. Ex: The higher the concentration of dust the greater the risk of irritation to the respiratory system and mechanical irritation to the eyes.

¹ *Described as Direct Reduced Iron (A) – Briquettes, hot-molded in The International Maritime Solid Bulk Cargoes (IMSBC) Code published by the International Maritime Organization (IMO).

- Skin contact:** Dust and small pieces of material may cause mechanical irritation and slight redness
- Eye contact:** Risk of mechanical irritation to the eyes, redness and pain when dust or small pieces come in contact with eyes.
- Inhalation:** Inhalation of the dust may cause irritation to the respiratory tracks. Symptoms may include coughing, sneezing, soreness of the throat and breathing difficulties.
- Ingestion:** If swallowed, dust or small pieces may cause gastrointestinal disturbances. An overdose of iron may cause irritation to the mouth, oesophagus and stomach

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical Data (Percentages by Weight):

Parameter	Typical concentration
Total Iron (TFe)	> 89.0 %
Metallic Iron (MFe):	> 81%
Carbon (C)	< 3.0 %
Phosphorus (P)	< 0.06 %
Sulphur (S)	< 0.02 %
Gangue	< 6.0 %

3.2. Ingredients

National Institute of Standards and Concentration Technology Chemical Abstract System

Ingredient	(CAS) Number	(Percentages by Weight)
HBI (Iron Furnace)	65996-67-0	
IRON	7439-89-6	81-88%
IRON (II) OXIDE	1345-25-1	4-8%
IRON (III) OXIDE	1309-37-1	2-8%
METAL OXIDE	Not Available	<4%
CARBON	7440-44-0	0.4-2.0

SECTION 4: First aid measures

4.1. Description of first aid measures

- Eye contact:** Wash immediately with plenty of water for 15 minutes, by maintaining the eyelids open. Seek medical attention of the irritation persists.
- Inhalation:** In the event of accident by inhalation, move the victim away from the contaminated area, taking all

	necessary precaution. Seek medical attention in case of breathing difficulties.
Ingestion:	Induce vomiting immediately. Seek medical advice.
Skin contact:	May cause mechanical irritation in contact with the skin, which can result in slight redness.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Use extinguishing media appropriate to other substances stored in close proximity.

Unsuitable extinguishing media:

- **DO NOT** use CO₂ (as CO may be formed)
- **DO NOT** use dry chemical.
- **DO NOT USE EITHER FRESH WATER OR SEAWATER TO COOL DOWN HOT MATERIAL** in enclosed spaces such as a cargo hold on a ship, unless strictly necessary to keep integrity of vessel and under Master's expertise. The material may slowly evolve hydrogen after contact with water and reacts more rapidly with salt water. If water is used use large amount of water to flood the material and provide adequate ventilation to let hydrogen gas generated escape to atmosphere.

5.2 Extinguishing procedures

- Wear fire protective clothing
- Wear self-contained breathing apparatus when entering enclosed spaces with HBI.
- Wear non-sparking footwear.
- Avoid all sources of ignition.
- Remove the hot material from the heap. On a ship, a clamshell bucket may be used.
- Divide hot material into small piles and spread it out to less than 0.5 m deep. The material will quickly cool below the ignition point.
- In the case which it is not practical to spread the material over a wide area such as in a hold of a ship, coverage using a non-oxidant material (e.g. sand, and finely crushed slag) could be used for smothering the fire and to inhibit the air supply (the decision on whether or not to apply this technique would depend on the circumstances of the emergency as the HBI would become contaminated).
- In fire situation, evacuate area and contact emergency services

5.3. Advice for fire-fighters

Implement protection measures appropriate to substances stored in close proximity. Wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode and full protective clothing. Do not breathe vapours and move upwind of the cloud of fumes.

SECTION 6: Accidental release measures

Keep unnecessary personnel away and use suitable protective equipment. Avoid dispersal of spilled material, runoff and contact with soil, sewers, waterways and drains. Place spilled material in an appropriate container or location for disposal. Recycle when possible

SECTION 7: Handling and storage

Caution: Do not spray water on hot HBI that is steaming (i.e., emitting water vapor). For additional information on transport information and instructions see Section 14.

7.1. Precautions for material handling

HBI is easily handled by all conventional bulk handling equipment typically used in steel mills, and can be handled in a similar manner to scrap such as:

- Front-end loader
- Crane with a magnet or clamshell-type bucket
- Scrap-yard magnets
- Conveyor belts

7.2. Conditions for safe storage, including any incompatibilities

The storage area should be as close as possible to the point of use. This will avoid double handling and avoid fines generation.

HBI can be stored in the following areas or containers:

- Yards (covered or uncovered)
- Silos or bins with adequate ventilation

Proper surface ventilation shall be provided for material in enclosed spaces. Temporary small increase in temperature may be expected after material handling in bulk. Maximum allowed ship loading temperature 65 C. If temperature exceeds 65 C, provide adequate surface ventilation to remove any hydrogen gas generation. Do not allow any hot work/spark generation on deck or surroundings.

Non-flammable when correctly piled. May self-heat if piled incorrectly. In fire situation, evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard.

The general guidelines for all forms of storage are:

- Clean and dry.
- Free of combustible materials: coal, wood, coke, etc.
- Free of chlorides or past cargoes: avoid cement, lye, borax.
- Care with adjacent cargoes: do not store near coal or other flammable material.

SECTION 8: Exposure controls/personal protection**Respiratory Protection:**

When dust is generated, provide adequate general ventilation to ensure that the Occupational Exposure Limits are not exceeded. If necessary provide local fume extraction, with the correct capture hood and capture velocity to match the conditions.

	As the last resort, suitable respiratory protective equipment should be provided for use by those at risk from inhalation of fumes. During handling dust may be generated and if ventilation is inadequate, the use of an FFP2 (EN 149:2001) type respirator is advisable.
Hand Protection:	Use of canvas gloves is advisable.
Eye Protection:	During handling (e.g. loading, unloading, cutting, etc.), dust may be generated, and the use of safety goggles is therefore advisable.
Skin/body Protection:	Personal protective equipment should be selected based on the task being performed and the risk involved.
Emergency facilities:	Safety showers; Eye wash station.
Other information:	Wear safety shoes. During handling, material can spill and use of helmet is advisable.
Exposure Limit:	ACGIH TLV (United States): TWA 10 mg/m ³ 8 hours(s). Form: Inhalable particle Consult local authorities for acceptable exposure limits

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	From light gray to black.
Odour:	Odourless.
pH:	Not relevant.
Melting point:	1150 to 1540 °C dependent upon the carbon content
Boiling point/boiling range:	2860 °C
Flash point:	Not relevant.
Evaporation Rate:	Not relevant.
Flammability LEL:	Not relevant
Flammability UEL:	Not relevant
Vapour pressure:	Not relevant.
Vapour density	Not relevant.
Apparent density:	approx. 5.0 g/cm ³

Bulk density:	2500 - 3300 kg/m ³
Water solubility:	Iron powder is insoluble at 22°C.
Partition Coefficient n-octanol/water:	Not relevant.
Self-ignition temperature	Not auto flammable. However, HBI piles can reach the ignition point under certain conditions: <ul style="list-style-type: none">• Sustained re-oxidation• Excessive fines content in the pile• Briquetting density below 5.0 gm/cm³• Accumulated hot product• Presence of excess water Under such conditions, the pile will ignite locally if the temperature of the pile exceeds 200° C (<i>ignition temperature</i>).
Decomposition Temperature:	Not relevant

SECTION 10: Stability and reactivity

Reactivity:	Reacts with oxidizing agents and acids. Outer layer may react in air to form a coating of iron oxide. Can react under certain conditions with water to form iron oxide and some hydrogen.
Chemical Stability:	Stable in dry air and under normal conditions
Incompatible Materials:	Incompatible with oxidizing agents and acids.

SECTION 11: Toxicological information

No toxicity data is available for this material.

Skin contact:	Dust and small pieces of material may cause mechanical irritation and slight redness
Eye contact:	Risk of mechanical irritation to the eyes, redness and pain when dust or small pieces come in contact with eyes.
Inhalation:	Inhalation of the dust may cause irritation to the respiratory tracks. Symptoms may include coughing, sneezing, soreness of the throat and breathing difficulties.
Ingestion:	If swallowed, dust or small pieces may cause gastrointestinal disturbances. An overdose of iron may cause irritation to the mouth, esophagus and stomach

SECTION 12: Ecological information

This material is not considered a contaminant to the environment. In the long term, it is stabilized in the form of oxides. Iron and its compounds are essential substances. Iron is an essential trace element, well-regulated in all living organisms. The available evidence shows the absence of iron biomagnification across the trophic chain both in the aquatic and terrestrial food chains

As iron is not bio-available, owing to its extreme insolubility in water, it is not systemically available or bio-accumulative and hence it does not fulfil either of the PBT and vPvB criteria for classification.

Avoid spillage in land or water. Local environmental regulations should be followed.

SECTION 13: Disposal considerations

When possible, the material should be recycled for further use. In the event that recycling is not possible, material should be disposed of in an appropriately permitted landfill site or by other means, always in compliance with applicable regulations. Material should not be disposed of in sewers or waterways.

SECTION 14: Transport information

14.1. UN number

Not applicable.

14.2. UN Proper shipping name

Chemical name: Hot Briquetted Iron

14.3. Transport hazard class (es)

According to UN recommendations, it is not classified as Dangerous Goods.

Classified as MHB, Briquettes Hot Molded under the regulations for ocean transport contained in the International Maritime Organization publication "International Maritime Solid Bulk Cargoes Code (IMSBC Code)

DRI Hazardous only in Bulk (MHB), group

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Transport in bulk according to Annex II of the MARPOL73/78 convention and the IBC Code

Not applicable.

14.7. Special precautions for user

Truck and Rail Road Transportation:

Material should be transported in the same way as with other bulk materials. Local transportation regulations should also be followed.

Maritime Transport:

The schedule for HBI or DRI (A) in the IMO IMSBC Code lists the following under the heading "Hazards":

- Temporary self-heating of about 30° Celsius may be expected after material is handled in bulk.
- Material may slowly evolve hydrogen after contact with water. Hydrogen is a flammable gas that can cause explosions when mixed with air in concentrations above 4 percent.
- Liable to cause oxygen depletion in cargo spaces.
- This cargo is non-combustible or has a low fire risk.

Additional information may also be found in the "Hot Briquetting Iron (HBI) Guide for handling, Maritime Carriage, and Storage" published by the Hot Briquetting Iron (HBIA) association.

SECTION 15: Regulatory information

OSHA/EPA: Not provided. Consult local regulations.

SECTION 16: Other information

Sources: [Iron Reach dossier³](#)
 International Maritime Solid Bulk Cargoes Code
 Hot Briquetted Iron Guide for Transporting and
 Handling at Terminals – Best Available Practice –
 2010

Index of Revision(s):

Rev:	Created by:	Reviewed by:	Approved by:	Change(s):
00	Joey Vasquez, Texas LLC	Victor Romo, Texas LLC	Suriel Garcia Sibaja, Texas LLC	First Edition 0.1
01	Joey Vasquez, Texas LLC	Chris Harris, Texas LLC	Suriel Garcia Sibaja, Texas LLC	Second Edition 2.0

Comments to Users:

This sheet supplements but does not replace instruction manuals. The information contained herein is given to the best of our knowledge concerning the substance indicated on the date on which it was updated. Information is provided in good faith.

Attention of users is also drawn to possible risks which may arise if the substance is applied for purposes other than those for which it has been designed.

This safety data sheet does not in any way exempt the user from knowing and complying with all regulatory texts applying to his or her activity. The user takes full responsibility for knowing and taking the precautions related to the use of the substance. References to regulatory provisions are given to assist the user in fulfilling the obligations incumbent on persons using a substance or a dangerous mixture.

All local and international measures and provisions which could apply should be referred to.

Attention of users is drawn to the possible existence of other provisions supplementing these rules.

This list is not to be taken as comprehensive. It does not exempt the user from ensuring that obligations under texts other than those to which reference is made do not apply to the detention and use of the substance, for which the user alone is responsible.

³ This link may be changed by ECHA in the future



ATTACHMENT 6
Voestalpine Texas Site Dust Health Risk Analysis

Total Pages: 31

Investigation No. 1415945

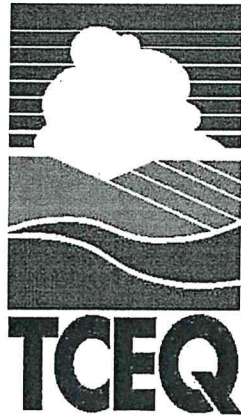
RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 - September 8, 2017

Refer to the
CONFIDENTIAL FILE
for the Voestalpine Texas Site
Dust Health Risk Analysis.

This page was
intentionally left blank.



ATTACHMENT 7
Laboratory Analysis Request No. 1705012

Total Pages: 8

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 - September 8, 2017

Texas Commission on Environmental Quality

Laboratory and Quality Assurance Section

P.O. Box 13087, MC-165

Austin, Texas 78711-3087

(512) 239-1716

Laboratory Analysis Results

Request Number: 1705012

Request Lead: Frank Martinez

Region: T14

Date Received: 5/19/2017

Facility(ies) Sampled	City	County	Facility Type
La Quinta Plant Voestalpine	Portland	San Patricio	Manufacturing

Sample(s) Received

Field ID Number: I Laboratory Sample Number: 1705012-001 Sampled by: Ashley Scott
 Sampling Site: Complainant's Property Date & Time Sampled: 05/17/17 15:00:00 Valid Sample: Yes
 Comments: Tape lift from the back door (outside) window glass located on the north side of the residence. (CMP 5)

Field ID Number: J Laboratory Sample Number: 1705012-002 Sampled by: Ashley Scott
 Sampling Site: Complainant's Property Date & Time Sampled: 05/17/17 15:05:00 Valid Sample: Yes
 Comments: Tape lift from a glass table on the back patio located on the north side of the residence. (CMP 5)

Field ID Number: K Laboratory Sample Number: 1705012-003 Sampled by: Ashley Scott
 Sampling Site: Complainant's Property Date & Time Sampled: 05/17/17 15:33:00 Valid Sample: Yes
 Comments: Tape lift from a glass table on the back deck located on the east side of the residence. (CMP 6)

Field ID Number: L Laboratory Sample Number: 1705012-004 Sampled by: Ashley Scott
 Sampling Site: Complainant's Property Date & Time Sampled: 05/17/17 15:41:00 Valid Sample: Yes
 Comments: Tape lift from the front window glass located on the northwest side of the residence. (CMP 6)

Field ID Number: M Laboratory Sample Number: 1705012-005 Sampled by: Ashley Scott
 Sampling Site: Complainant's Property Date & Time Sampled: 05/17/17 15:58:00 Valid Sample: Yes
 Comments: Tape lift from the pool ladder (outside of pool) located on the northwest (back) side of the residence. (CMP 7)

Field ID Number: N Laboratory Sample Number: 1705012-006 Sampled by: Ashley Scott
 Sampling Site: Complainant's Property Date & Time Sampled: 05/17/17 16:07:00 Valid Sample: Yes
 Comments: Tape lift from the front window glass located on the southeast side of the residence. (CMP 7)

Requested Laboratory Procedure(s):

Analysis: AP007MIC
 Environmental Sample Characterization using Polarized Light Microscopy

Analysis: AP008MIC
 Sample Characterization using Scanning Electron Microscope with an Energy Dispersive X-Ray Microanalysis Spectrometer

Texas Commission on Environmental Quality

Laboratory and Quality Assurance Section

P.O. Box 13087, MC-165

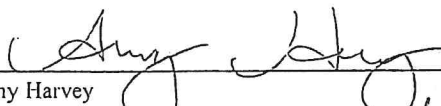
Austin, Texas 78711-3087

(512) 239-1716

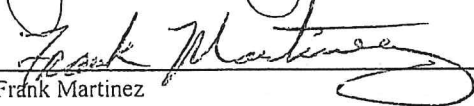
Laboratory Analysis Results

Request Number: 1705012

Please note that this analytical technique is not capable of measuring all compounds which might have adverse health effects. For questions on the analytical procedures please contact the laboratory manager at (512) 239-1716. For an update on the health effects evaluation of these data, please contact the Toxicology Division at (512) 239-1795.

Analyst: 
Amy Harvey

Date: 6/6/17

Laboratory Manager: 
Frank Martinez

Date: 6/6/17

Laboratory Analysis Results

Request Number: 1705012

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705012-001

Analysis began: 5/24/2017

Analyst: Amy Harvey

SOP: AP007MIC Analysis completed: 5/31/2017

Sample I was lightly loaded. The sample contained between 5 and 20% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 20 - 120 μm . Metal particles were consistent in appearance with all other field samples in this request (1705012) and with reference samples 1705011-010RS, -011RS, and -012RS. The sample also contained between 61 and 70% common clays and minerals, between 5 and 20% fungal spores, and between 5 and 20% pollen.

Sample Number: 1705012-001

Analysis began: 5/25/2017

Analyst: Amy Harvey

SOP: AP008MIC Analysis completed: 5/31/2017

Energy dispersive spectroscopy (EDS) analysis of a metal particle showed elements carbon, oxygen, sodium, magnesium, aluminum, silicon, chlorine, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

This x-ray spectrum of a metal particle is consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz, feldspar, and limestone.

Sample Number: 1705012-002

Analysis began: 5/24/2017

Analyst: Amy Harvey

SOP: AP007MIC Analysis completed: 5/31/2017

Sample J was lightly loaded. Metal particles accounted for less than 5% of the particle coverage. Metal particles ranged in color from black to reddish and ranged in size from 5 - 40 μm . The sample contained between 71 and 80% common clays and minerals, between 5 and 20% pollen, and between 5 and 20% plant material. Other particles present in quantities less than 5% included fungal spores, plant trichomes, and starch grains.

Sample Number: 1705012-002

Analysis began: 5/25/2017

Analyst: Amy Harvey

SOP: AP008MIC Analysis completed: 5/31/2017

EDS analysis of a metal particle showed elements carbon, oxygen, aluminum, silicon, chlorine, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

EDS analysis of a second metal particle showed elements carbon, oxygen, sodium, magnesium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

These x-ray spectra of metal particles are consistent with the reference samples submitted with request number 1705011.

EDS analysis of a several particles confirmed the presence of common clays and minerals such as limestone and quartz.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Attachment 7

Inv. No. 1415945

Page 3 of 6

Laboratory Analysis Results

Request Number: 1705012

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705012-003

Analysis began: 5/24/2017

Analyst: Amy Harvey

SOP: AP007MIC Analysis completed: 5/31/2017

Sample K was heavily loaded. The sample contained between 41 and 50% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 1 - 120 μm . The sample also contained between 41 and 50% common clays and minerals. Other particles present in quantities less than 5% included fungal material, plant trichomes, and pollen.

Sample Number: 1705012-003

Analysis began: 5/25/2017

Analyst: Amy Harvey

SOP: AP008MIC Analysis completed: 5/31/2017

EDS analysis of a metal particle showed elements carbon, oxygen, aluminum, silicon, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

EDS analysis of a second metal particle showed elements carbon, oxygen, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

EDS analysis of a third metal particle showed elements carbon, oxygen, silicon, phosphorus, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

These x-ray spectra of metal particles are consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as feldspar, quartz, and limestone.

Sample Number: 1705012-004

Analysis began: 5/24/2017

Analyst: Amy Harvey

SOP: AP007MIC Analysis completed: 5/31/2017

Sample L was moderately loaded. The sample contained between 21 and 30% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 1 - 90 μm . The sample also contained between 51 and 60% fungal material and between 21 and 30% common clays and minerals. Other particles present in quantities less than 5% included fungal spores and pollen.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Laboratory Analysis Results

Request Number: 1705012

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705012-004

Analysis began: 5/25/2017

Analyst: Amy Harvey

SOP: AP008MIC Analysis completed: 5/31/2017

EDS analysis of a metal particle showed elements carbon, oxygen, sodium, silicon, sulfur, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

EDS analysis of a second metal particle showed elements carbon, oxygen, sodium, magnesium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

EDS analysis of a third metal particle showed elements carbon, oxygen, sodium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

These x-ray spectra of metal particles are consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as limestone, feldspar, and quartz.

Sample Number: 1705012-005

Analysis began: 5/24/2017

Analyst: Amy Harvey

SOP: AP007MIC Analysis completed: 5/31/2017

Sample M was heavily loaded. The sample contained between 71 and 80% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 1 - 130 μm . The sample also contained between 5 and 20% common clays and minerals and between 5 and 20% fungal material. Other particles present in quantities less than 5% included burned vegetation, plant trichomes, pollen, and starch grains.

Sample Number: 1705012-005

Analysis began: 5/26/2017

Analyst: Amy Harvey

SOP: AP008MIC Analysis completed: 5/31/2017

EDS analysis of a metal particle showed elements carbon, oxygen, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

EDS analysis of a second metal particle showed elements carbon, oxygen, aluminum, silicon, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

EDS analysis of a third metal particle showed elements carbon, oxygen, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

These x-ray spectra of metal particles are consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as feldspar and quartz.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Attachment 7

Inv. No. 1415945

Page 5 of 8

Laboratory Analysis Results

Request Number: 1705012

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705012-006

Analysis began: 5/24/2017

Analyst: Amy Harvey

SOP: AP007MIC Analysis completed: 5/31/2017

Sample N was lightly loaded. The sample contained between 31 and 40% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 1 - 100 μm . The sample also contained between 41 and 50% fungal material and between 5 and 20% common clays and minerals. Other particles present in quantities less than 5% included pollen and plant material.

Sample Number: 1705012-006

Analysis began: 5/26/2017

Analyst: Amy Harvey

SOP: AP008MIC Analysis completed: 5/31/2017

EDS analysis of a metal particle showed elements carbon, oxygen, sodium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron. EDS analysis of a second metal particle showed elements carbon, oxygen, sodium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen, chlorine, and iron. EDS analysis of a third metal particle showed elements carbon, oxygen, sodium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron. These x-ray spectra of metal particles are consistent with the reference samples submitted with request number 1705011. EDS analysis of several particles confirmed the presence of common clays and mineral such as quartz and feldspar.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Attachment 7

Inv. No. 1415945

Page 6 of 8

Laboratory Analysis Results

Request Number: 1705012

Analysis Code: AP008MIC

Qualifier Notes:

- ND - not detected
- NQ - concentration can not be quantified due to possible interferences or coelutions.
- SDL - Sample Detection Limit (Limit of Detection adjusted for dilutions).
- SQL - Sample Quantitation Limit (Limit of Quantitation adjusted for dilution).
- INV - Invalid.
- J - Reported concentration is below SDL.
- L - Reported concentration is at or above the SDL and is below the lower limit of quantitation.
- E - Reported concentration exceeds the upper limit of instrument calibration.
- M - Result modified from previous result.
- T - Data was not confirmed by a confirmational analysis. Compound and/or results is tentatively identified.
- F - Established acceptance criteria was not met due to factors outside the laboratory's control.
- H - Not all associated hold time specifications were met. Data may be biased.
- C - Sample received with a missing or broken custody seal.
- R - Sample received with a missing or incomplete chain of custody.
- I - Sample received without a legible unique identifier.
- G - Sample received in an improper container.
- U - Sample received with insufficient sample volume.
- W - Sample received with insufficient preservation.

TCEQ laboratory customer support may be reached at Frank.Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Susan Hoelscher

From: Hattie Waites
Sent: Tuesday, June 06, 2017 10:22 AM
To: Ashley Scott
Cc: Frank Martinez
Subject: Request Report 1705012
Attachments: 1705012.pdf

Attached is your PDF file for Request Report 1705012.

You will not receive a hard copy.



ATTACHMENT 8
Laboratory Analysis Request No. 1705014

Total Pages: 8

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 - September 8, 2017

Texas Commission on Environmental Quality
 Laboratory and Quality Assurance Section
 P.O. Box 13087, MC-165
 Austin, Texas 78711-3087
 (512) 239-1716

Laboratory Analysis Results
 Request Number: 1705014

Request Lead: Frank Martinez

Region: T14

Date Received: 5/22/2017

Facility(ies) Sampled	City	County	Facility Type
La Quinta Plant Voestalpine	Portland	San Patricio	Manufacturing

Sample(s) Received

Field ID Number: P Laboratory Sample Number: 1705014-001 Sampled by: Ashley Scott
 Sampling Site: Complainant's Property Date & Time Sampled: 05/18/17 14:52:00 Valid Sample: Yes
 Comments: Tape lift from the wood siding of the garage door (painted tan) located on the north (front) side of the residence. (CMP 9)

Field ID Number: Q Laboratory Sample Number: 1705014-002 Sampled by: Ashley Scott
 Sampling Site: Complainant's Property Date & Time Sampled: 05/18/17 15:12:00 Valid Sample: Yes
 Comments: Tape lift from the window glass located on the east (front) side of the residence. (CMP 10)

Field ID Number: R Laboratory Sample Number: 1705014-003 Sampled by: Ashley Scott
 Sampling Site: Complainant's Property Date & Time Sampled: 05/18/17 15:15:00 Valid Sample: Yes
 Comments: Tape lift from the front door (painted blue) located on the east (front) side of the residence. (CMP 10)

Field ID Number: S Laboratory Sample Number: 1705014-004 Sampled by: Ashley Scott
 Sampling Site: Complainant's Property Date & Time Sampled: 05/18/17 15:35:00 Valid Sample: Yes
 Comments: Tape lift from the front door window glass located on the north-northwest side of the residence. (CMP 11)

Field ID Number: T Laboratory Sample Number: 1705014-005 Sampled by: Ashley Scott
 Sampling Site: Complainant's Property Date & Time Sampled: 05/18/17 15:40:00 Valid Sample: Yes
 Comments: Tape lift from the ledge of the screen on the window located on the north-northwest (front) side of the residence. (CMP 11)

Field ID Number: U Laboratory Sample Number: 1705014-006 Sampled by: Ashley Scott
 Sampling Site: Complainant's Property Date & Time Sampled: 05/18/17 16:04:00 Valid Sample: Yes
 Comments: Tape lift from the window glass located on the south (front) side of the residence. (CMP 8)

Field ID Number: V Laboratory Sample Number: 1705014-007 Sampled by: Ashley Scott
 Sampling Site: Complainant's Property Date & Time Sampled: 05/18/17 16:10:00 Valid Sample: Yes
 Comments: Tape lift from the ledge of an above-ground pool located in the north (back) side of the residence. (CMP 8)

Requested Laboratory Procedure(s):

Analysis: AP007MIC

Environmental Sample Characterization using Polarized Light Microscopy

Analysis: AP008MIC

Sample Characterization using Scanning Electron Microscope with an Energy Dispersive X-Ray Microanalysis Spectrometer

Texas Commission on Environmental Quality

Laboratory and Quality Assurance Section

P.O. Box 13087, MC-165

Austin, Texas 78711-3087

(512) 239-1716

Laboratory Analysis Results

Request Number: 1705014

Please note that this analytical technique is not capable of measuring all compounds which might have adverse health effects. For questions on the analytical procedures please contact the laboratory manager at (512) 239-1716. For an update on the health effects evaluation of these data, please contact the Toxicology Division at (512) 239-1795.

Analyst: Jeffrey Kettman
Jeffrey Kettman

Date: 6/9/17

Laboratory Manager: Frank Martinez
Frank Martinez

Date: 6/9/17

Laboratory Analysis Results

Request Number: 1705014

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705014-001

Analysis began: 6/2/2017

Analyst: Jeffrey Kettelman

SOP: AP007MIC Analysis completed: 6/5/2017

Sample P was lightly loaded. The sample contained less than 5% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 1 - 100 μm . The Fungal spores accounted for over 80% of the particle coverage. The sample contained between 5 and 20% paper fibers. Other particles present in quantities less than 5% included common clays and minerals, and rubber dust.

Sample Number: 1705014-001

Analysis began: 6/2/2017

Analyst: Jeffrey Kettelman

SOP: AP008MIC Analysis completed: 6/5/2017

Energy dispersive spectroscopy (EDS) analysis of a metal particle showed elements carbon, oxygen, aluminum, silicon, and iron. The primary peaks in the x-ray spectrum were oxygen and iron. EDS analysis of a second metal particle showed elements carbon, oxygen, sodium, magnesium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were carbon, oxygen, and iron.

These x-ray spectra of metal particles are consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz.

Sample Number: 1705014-002

Analysis began: 6/2/2017

Analyst: Jeffrey Kettelman

SOP: AP007MIC Analysis completed: 6/5/2017

Sample Q was moderately loaded. The sample contained between 5 and 20% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 1 - 300 μm . The sample also contained between 21 and 30% common clays and minerals, between 21 and 30% fungal spores, and between 21 and 30% plant fibers. Other particles present in quantities less than 5% included plant stellate hairs, plant trichomes, pollen, starch grains, and rubber dust.

TCEQ laboratory customer support may be reached at Frank.Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Laboratory Analysis Results

Request Number: 1705014

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705014-002

Analysis began: 6/2/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC Analysis completed: 6/5/2017

EDS analysis of a metal particle showed elements carbon, oxygen, sodium, magnesium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron. This x-ray spectrum of a metal particle is consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz and feldspar.

Sample Number: 1705014-003

Analysis began: 6/2/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 6/5/2017

Sample R was lightly loaded. The sample contained less than 5% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 1 - 100 μm . The sample contained between 31 and 40% plant material, between 21 and 30% common clays and minerals, between 5 and 20% fungal spores, and between 5 and 20% plant stellate hairs. Other particles present in quantities less than 5% included animal hair, plant trichomes, pollen, and rubber dust.

Sample Number: 1705014-003

Analysis began: 6/2/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC Analysis completed: 6/5/2017

EDS analysis of a metal particle showed elements carbon, oxygen, sodium, magnesium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were carbon, oxygen, and iron.

This x-ray spectrum of a metal particle is consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz and limestone.

Sample Number: 1705014-004

Analysis began: 6/2/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 6/5/2017

Sample S was lightly loaded. The sample contained less than 5% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 1 - 40 μm . The sample contained between 41 and 50% common clays and minerals, between 41 and 50% fungal spores, and between 5 and 20% paper fibers.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Laboratory Analysis Results

Request Number: 1705014

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705014-006

Analysis began: 6/2/2017

Analyst: Jeffrey Kettelman

SOP: AP008MIC Analysis completed: 6/5/2017

EDS analysis of a metal particle showed elements carbon, oxygen, aluminum, chlorine, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

This x-ray spectrum of a metal particle is consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz and feldspar.

Sample Number: 1705014-007

Analysis began: 6/2/2017

Analyst: Jeffrey Kettelman

SOP: AP007MIC Analysis completed: 6/5/2017

Sample V was heavily loaded. The sample contained less than 5% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 1 - 300 μm . Common clays and minerals accounted for over 80% of the particle coverage. The sample contained between 5 and 20% weathered paint. Other particles present in quantities less than 5% included paper fibers and plant fibers.

Sample Number: 1705014-007

Analysis began: 6/5/2017

Analyst: Jeffrey Kettelman

SOP: AP008MIC Analysis completed: 6/5/2017

EDS analysis of a metal particle showed elements carbon, oxygen, aluminum, silicon, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

This x-ray spectrum of a metal particle is consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz.

TCEQ laboratory customer support may be reached at Frank.Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Laboratory Analysis Results

Request Number: 1705014

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705014-004

Analysis began: 6/2/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC Analysis completed: 6/5/2017

EDS analysis of a metal particle showed elements carbon, oxygen, sodium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

This x-ray spectrum of a metal particle is consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz.

Sample Number: 1705014-005

Analysis began: 6/2/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 6/5/2017

Sample T was lightly loaded. The sample contained between 5 and 20% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 1 - 120 μm . The sample also contained between 41 and 50% common clays and minerals, and between 21 and 30% plant material. Other particles present in quantities less than 5% included plant fibers, plant stellate hairs, plant trichomes, and pollen.

Sample Number: 1705014-005

Analysis began: 6/2/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC Analysis completed: 6/5/2017

EDS analysis of a metal particle showed elements carbon, oxygen, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

This x-ray spectrum of a metal particle is consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz and limestone.

Sample Number: 1705014-006

Analysis began: 6/2/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 6/5/2017

Sample U was heavily loaded. The sample contained between 5 and 20% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 1 - 100 μm . The sample also contained between 31 and 40% fungal spores, between 21 and 30% common clays and minerals, and between 21 and 30% plant material. Other particles present in quantities less than 5% included plant fibers, plant stellate hairs, plant trichomes, and pollen.

TCEQ laboratory customer support may be reached at Frank.Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Attachment 8

Inv. No. 1415945

Page 6 of 8

Laboratory Analysis Results

Request Number: 1705014

Analysis Code: AP008MIC

Qualifier Notes:

- ND - not detected
- NQ - concentration can not be quantified due to possible interferences or coelutions.
- SDL - Sample Detection Limit (Limit of Detection adjusted for dilutions).
- SQL - Sample Quantitation Limit (Limit of Quantitation adjusted for dilution).
- INV - Invalid.
- J - Reported concentration is below SDL.
- L - Reported concentration is at or above the SDL and is below the lower limit of quantitation.
- E - Reported concentration exceeds the upper limit of instrument calibration.
- M - Result modified from previous result.
- T - Data was not confirmed by a confirmational analysis. Compound and/or results is tentatively identified.
- F - Established acceptance criteria was not met due to factors outside the laboratory's control.
- H - Not all associated hold time specifications were met. Data may be biased.
- C - Sample received with a missing or broken custody seal.
- R - Sample received with a missing or incomplete chain of custody.
- I - Sample received without a legible unique identifier.
- G - Sample received in an improper container.
- U - Sample received with insufficient sample volume.
- W - Sample received with insufficient preservation.

TCEQ laboratory customer support may be reached at Frank.Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Susan Hoelscher

From: Ashley Scott
Sent: Friday, June 09, 2017 2:37 PM
To: Susan Hoelscher
Cc: Kelly Ruble; Sonny Lopez
Subject: FW: Request Report 1705014
Attachments: 1705014.pdf

From: Hattie Waites
Sent: Friday, June 09, 2017 2:35 PM
To: Ashley Scott <Ashley.Scott@Tceq.Texas.Gov>
Cc: Frank Martinez <Frank.Martinez@Tceq.Texas.Gov>
Subject: Request Report 1705014

Attached is your PDF file for Request Report 1705014.

You will not receive a hard copy.



ATTACHMENT 9
Laboratory Analysis Request No. 1705013

Total Pages: 8

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 - September 8, 2017

Texas Commission on Environmental Quality

Laboratory and Quality Assurance Section

P.O. Box 13087, MC-165

Austin, Texas 78711-3087

(512) 239-1716

Laboratory Analysis Results

Request Number: 1705013

Request Lead: Frank Martinez

Region: T14

Date Received: 5/22/2017

Facility(ies) Sampled	City	County	Facility Type
La Quinta Plant Voestalpine	Portland	San Patricio	Manufacturing

Sample(s) Received

Field ID Number: 1 Laboratory Sample Number: 1705013-001 Sampled by: Susan Hoelscher
 Sampling Site: Complainant's Property Date & Time Sampled: 05/18/17 14:35:00 Valid Sample: Yes
 Comments: Tape lift from an outside metal window sill located on the east (front) side of the school. (CMP 13)

Field ID Number: 2 Laboratory Sample Number: 1705013-002 Sampled by: Susan Hoelscher
 Sampling Site: Complainant's Property Date & Time Sampled: 05/18/17 14:50:00 Valid Sample: Yes
 Comments: Tape lift from an outdoor light glass cover located on the southeast (front) side of the residence. (CMP 14)

Field ID Number: 3 Laboratory Sample Number: 1705013-003 Sampled by: Susan Hoelscher
 Sampling Site: Complainant's Property Date & Time Sampled: 05/18/17 14:52:00 Valid Sample: Yes
 Comments: Tape lift from an outside window sill located on the southeast (front) side of the residence. (CMP 14)

Field ID Number: 4 Laboratory Sample Number: 1705013-004 Sampled by: Susan Hoelscher
 Sampling Site: Complainant's Property Date & Time Sampled: 05/18/17 14:55:00 Valid Sample: Yes
 Comments: Tape lift from the trunk of a care (dark gray) parked on the southeast (front) side of the residence. (CMP 14)

Field ID Number: 5 Laboratory Sample Number: 1705013-005 Sampled by: Susan Hoelscher
 Sampling Site: Complainant's Property Date & Time Sampled: 05/18/17 15:23:00 Valid Sample: Yes
 Comments: Sample taken from an outside window sill located on the southeast (front) side of the residence. (CMP 16)

Field ID Number: 6 Laboratory Sample Number: 1705013-006 Sampled by: Susan Hoelscher
 Sampling Site: Complainant's Property Date & Time Sampled: 05/18/17 15:27:00 Valid Sample: Yes
 Comments: Sample taken from the front door (brown) located on the southeast (front) side of the residence. (CMP 16)

Field ID Number: 0 Laboratory Sample Number: 1705013-007 Sampled by: Susan Hoelscher
 Sampling Site: Complainant's Property Date & Time Sampled: 05/18/17 14:47:00 Valid Sample: Yes
 Comments: Sample taken from an outside window glass located on the north (front) side of the residence. (CMP 9)

Requested Laboratory Procedure(s):

Analysis: AP007MIC
 Environmental Sample Characterization using Polarized Light Microscopy

Analysis: AP008MIC
 Sample Characterization using Scanning Electron Microscope with an Energy Dispersive X-Ray Microanalysis Spectrometer

Texas Commission on Environmental Quality

Laboratory and Quality Assurance Section
P.O. Box 13087, MC-165
Austin, Texas 78711-3087
(512) 239-1716

Laboratory Analysis Results**Request Number: 1705013**

Please note that this analytical technique is not capable of measuring all compounds which might have adverse health effects. For questions on the analytical procedures please contact the laboratory manager at (512) 239-1716. For an update on the health effects evaluation of these data, please contact the Toxicology Division at (512) 239-1795.

Analyst: Jeffrey Ketteman
Jeffrey Ketteman

Date: 6/1/17

Laboratory Manager: Frank Martinez
Frank Martinez

Date: 6/1/17

Laboratory Analysis Results

Request Number: 1705013

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705013-001

Analysis began: 5/30/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 6/1/2017

Sample one was lightly loaded. Metal particles accounted for over 80% of the particle coverage. Metal particles ranged in color from black to reddish and ranged in size from 1 - 200 μm . The sample contained between 5 and 20% common clays and minerals. Other particles present in quantities less than 5% included fungal spores, plant stellate hairs, pollen, and rubber dust.

Sample Number: 1705013-001

Analysis began: 5/31/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC Analysis completed: 6/1/2017

Energy dispersive spectroscopy (EDS) analysis of a metal particle showed elements carbon, oxygen, sodium, magnesium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

EDS analysis of a second metal particle showed elements carbon, oxygen, sodium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

These x-ray spectra of metal particles are consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz and limestone.

Sample Number: 1705013-002

Analysis began: 5/30/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 6/1/2017

Sample two was heavily loaded. Metal particles accounted for less than 5% of the particle coverage. Metal particles ranged in color from black to reddish and ranged in size from 1 - 120 μm . White weathered paint accounted for over 80% of the particle coverage. Other particles present in quantities less than 5% included common clays and minerals.

Sample Number: 1705013-002

Analysis began: 5/31/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC Analysis completed: 6/1/2017

EDS analysis of a metal particle showed elements carbon, oxygen, aluminum, silicon, chlorine, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

EDS analysis of a second metal particle showed elements carbon, oxygen, sodium, aluminum, silicon, chlorine, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

These x-ray spectra of metal particles are consistent with the reference samples submitted with request number 1705011.

EDS analysis of a weathered paint particle showed elements carbon, oxygen, sodium, aluminum, silicon, chlorine, and titanium. The primary peaks in the x-ray spectrum were carbon and silicon.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz and feldspar.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Attachment 9

Inv. No. 1415945

Page 3 of 8

Laboratory Analysis Results

Request Number: 1705013

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705013-003

Analysis began: 5/30/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 6/1/2017

Sample three was heavily loaded. Metal particles accounted for between 61 and 70% of the particle coverage. Metal particles ranged in color from black to reddish and ranged in size from 1 - 100 μm . The sample contained between 21 and 30% common clays and minerals and between 5 and 20% weathered paint. Other particles present in quantities less than 5% included burned vegetation, fungal spores, plant stellate hairs, and pollen.

Sample Number: 1705013-003

Analysis began: 5/31/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC Analysis completed: 6/1/2017

EDS analysis of a metal particle showed elements carbon, oxygen, sodium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron. EDS analysis of a second metal particle showed elements carbon, oxygen, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron. These x-ray spectra of metal particles are consistent with the reference samples submitted with request number 1705011. EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz.

Sample Number: 1705013-004

Analysis began: 5/30/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 6/1/2017

Sample four was lightly loaded. Metal particles accounted for between 61 and 70% of the particle coverage. Metal particles ranged in color from black to reddish and ranged in size from 1 - 200 μm . The sample contained between 21 and 30% common clays and minerals. Other particles present in quantities less than 5% included paper fibers, plant trichomes, pollen, and rubber dust.

Sample Number: 1705013-004

Analysis began: 5/31/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC Analysis completed: 6/1/2017

EDS analysis of a metal particle showed elements carbon, oxygen, silicon, and iron. The primary peaks in the x-ray spectrum were oxygen and iron. EDS analysis of a second metal particle showed elements carbon, oxygen, sodium, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron. These x-ray spectra of metal particles are consistent with the reference samples submitted with request number 1705011. EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz and feldspar.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Laboratory Analysis Results

Request Number: 1705013

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705013-005

Analysis began: 5/31/2017

Analyst: Jeffrey Kettelman

SOP: AP007MIC Analysis completed: 6/1/2017

Sample five was moderately loaded. Metal particles accounted for between 41 and 50% of the particle coverage. Metal particles ranged in color from black to reddish and ranged in size from 1 - 200 μm . The sample contained between 31 and 40% weathered paint and between 5 and 20% common clays and minerals. Other particles present in quantities less than 5% included paint overspray, plant stellate hairs, and pollen.

Sample Number: 1705013-005

Analysis began: 5/31/2017

Analyst: Jeffrey Kettelman

SOP: AP008MIC Analysis completed: 6/1/2017

EDS analysis of a metal particle showed elements carbon, oxygen, sodium, magnesium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron. EDS analysis of a second metal particle showed elements carbon, oxygen, sodium, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were carbon, oxygen, and iron. These x-ray spectra of metal particles are consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as feldspars.

Sample Number: 1705013-006

Analysis began: 5/31/2017

Analyst: Jeffrey Kettelman

SOP: AP007MIC Analysis completed: 6/1/2017

Sample six was lightly loaded. Metal particles accounted for between 41 and 50% of the particle coverage. Metal particles ranged in color from black to reddish and ranged in size from 1 - 120 μm . The sample contained between 51 and 60% common clays and minerals. Other particles present in quantities less than 5% included carbonaceous material, fungal spores, and paper fibers.

Sample Number: 1705013-006

Analysis began: 5/31/2017

Analyst: Jeffrey Kettelman

SOP: AP008MIC Analysis completed: 6/1/2017

EDS analysis of a metal particle showed elements carbon, oxygen, sodium, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

EDS analysis of a second iron particle showed elements carbon, oxygen, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

These x-ray spectra of metal particles are consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz and limestone.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Laboratory Analysis Results

Request Number: 1705013

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705013-007

Analysis began: 5/31/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 6/1/2017

Sample O was lightly loaded. Metal particles accounted for less than 5% of the particle coverage. Metal particles ranged in color from black to reddish and ranged in size from 1 - 40 μm . The sample contained between 61 and 70% fungal spores and between 21 and 30% paper fibers. Other particles present in quantities less than 5% included plant stellate hairs and plant material.

Sample Number: 1705013-007

Analysis began: 5/31/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC Analysis completed: 6/1/2017

EDS analysis of a metal particle showed elements carbon, oxygen, aluminum, silicon, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

EDS analysis of a second metal particle showed elements carbon, oxygen, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

These x-ray spectra of metal particles are consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as feldspar and limestone.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Attachment 9

Inv. No. 1415945

Page 6 of 8

Laboratory Analysis Results

Request Number: 1705013

Analysis Code: AP008MIC

Qualifier Notes:

ND - not detected
NQ - concentration can not be quantified due to possible interferences or coelutions.
SDL - Sample Detection Limit (Limit of Detection adjusted for dilutions).
SQL - Sample Quantitation Limit (Limit of Quantitation adjusted for dilution).
INV - Invalid.
J - Reported concentration is below SDL.
L - Reported concentration is at or above the SDL and is below the lower limit of quantitation.
E - Reported concentration exceeds the upper limit of instrument calibration.
M - Result modified from previous result.
T - Data was not confirmed by a confirmational analysis. Compound and/or results is tentatively identified.
F - Established acceptance criteria was not met due to factors outside the laboratory's control.
H - Not all associated hold time specifications were met. Data may be biased.
C - Sample received with a missing or broken custody seal.
R - Sample received with a missing or incomplete chain of custody.
I - Sample received without a legible unique identifier.
G - Sample received in an improper container.
U - Sample received with insufficient sample volume.
W - Sample received with insufficient preservation.

TCEQ laboratory customer support may be reached at Frank.Martinez@tceq.texas.gov

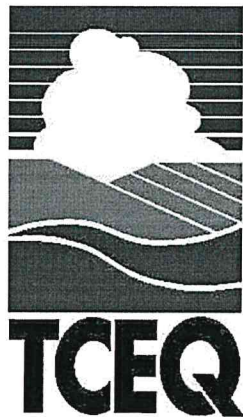
The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Susan Hoelscher

From: Hattie Waites
Sent: Friday, June 02, 2017 3:37 PM
To: Susan Hoelscher
Cc: Frank Martinez
Subject: Request Report 1705013
Attachments: 1705013.pdf

Attached is your PDF file for Request Report 1705013.

You will not receive a hard copy.



ATTACHMENT 10
Laboratory Analysis Request No. 1705016

Total Pages: 7

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 - September 8, 2017

Texas Commission on Environmental Quality

Laboratory and Quality Assurance Section
P.O. Box 13087, MC-165
Austin, Texas 78711-3087
(512) 239-1716

Laboratory Analysis Results

Request Number: 1705016

Request Lead: Frank Martinez

Region: T14

Date Received: 5/24/2017

Facility(ies) Sampled	City	County	Facility Type
La Quinta Plant Voestalpine	Portland	San Patricio	Manufacturing

Sample(s) Received

Field ID Number: 7 Laboratory Sample Number: 1705016-001 Sampled by: Susan Hoelscher
Sampling Site: Complainant's Property Date & Time Sampled: 05/19/17 13:33:00 Valid Sample: Yes
Comments: Tape lift from an outside window glass located on the south (front) side of the residence. (CMP 29)

Field ID Number: 8 Laboratory Sample Number: 1705016-002 Sampled by: Susan Hoelscher
Sampling Site: Complainant's Property Date & Time Sampled: 05/19/17 13:35:00 Valid Sample: Yes
Comments: Tape lift from an outdoor light plastic cover located on the south/southwest (front) side of the residence. (CMP 29)

Field ID Number: 9 Laboratory Sample Number: 1705016-003 Sampled by: Susan Hoelscher
Sampling Site: Complainant's Property Date & Time Sampled: 05/19/17 14:25:00 Valid Sample: Yes
Comments: Tape lift from an outside window glass located on the east (front) side of the residence. (CMP 28)

Field ID Number: 10 Laboratory Sample Number: 1705016-004 Sampled by: Susan Hoelscher
Sampling Site: Complainant's Property Date & Time Sampled: 05/19/17 14:26:00 Valid Sample: Yes
Comments: Tape lift from an outdoor light glass cover located on the east (front) side of the residence. (CMP 28)

Field ID Number: W Laboratory Sample Number: 1705016-005 Sampled by: Susan Hoelscher
Sampling Site: Complainant's Property Date & Time Sampled: 05/19/17 14:48:00 Valid Sample: Yes
Comments: Tape lift from an outside window glass located on the south (front) side of the residence. (CMP 54)

Field ID Number: X Laboratory Sample Number: 1705016-006 Sampled by: Susan Hoelscher
Sampling Site: Complainant's Property Date & Time Sampled: 05/19/17 14:54:00 Valid Sample: Yes
Comments: Tape lift from the garage door (painted tan) located on the north (back) side of the residence. (CMP 54)

Requested Laboratory Procedure(s):

Analysis: AP007MIC
Environmental Sample Characterization using Polarized Light Microscopy

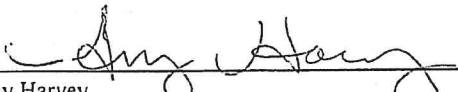
Analysis: AP008MIC
Sample Characterization using Scanning Electron Microscope with an Energy Dispersive X-Ray Microanalysis Spectrometer

Texas Commission on Environmental Quality


Laboratory and Quality Assurance Section
P.O. Box 13087, MC-165
Austin, Texas 78711-3087
(512) 239-1716

Laboratory Analysis Results**Request Number: 1705016**

Please note that this analytical technique is not capable of measuring all compounds which might have adverse health effects. For questions on the analytical procedures please contact the laboratory manager at (512) 239-1716. For an update on the health effects evaluation of these data, please contact the Toxicology Division at (512) 239-1795.

Analyst: 
Amy Harvey

Date: 6/9/17

Laboratory Manager: 
Frank Martinez

Date: 6/12/17

Laboratory Analysis Results

Request Number: 1705016

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705016-001

Analysis began: 6/6/2017

Analyst: Amy Harvey

SOP: AP007MIC Analysis completed: 6/8/2017

Sample 7 was lightly loaded. The sample contained between 5 and 20% metal particles. Only three metal particles were found on the subsample. Metal particles ranged in color from black to reddish and ranged in size from 5 - 150 μm . Metal particles were consistent in appearance with metal particles identified in other field samples in this request (1705016) and with reference samples 1705011-010RS, -011RS, and -012RS. The sample also contained between 31 and 40% common clays and minerals, between 31 and 40% fungal spores, and between 5 and 20% plant stellate hairs. Other particles present in quantities less than 5% included plant fibers, pollen, and rubber dust.

Sample Number: 1705016-001

Analysis began: 6/6/2017

Analyst: Amy Harvey

SOP: AP008MIC Analysis completed: 6/8/2017

Energy dispersive spectroscopy (EDS) analysis of a metal particle showed elements carbon, oxygen, aluminum, silicon, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

This x-ray spectrum of a metal particle is consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz, feldspar, and salt (sodium chloride).

Sample Number: 1705016-002

Analysis began: 6/6/2017

Analyst: Amy Harvey

SOP: AP007MIC Analysis completed: 6/8/2017

Sample 8 was heavily loaded. The sample contained less than 5% metal particles. Only one metal particle was found on the subsample. This metal particle was colored black with a reddish edge and was 60 μm . Fungal spores accounted for over 80% of the particle coverage. Other particles present in quantities less than 5% included common clays and minerals, white paint overspray, plant fibers, and plant stellate hairs.

Sample Number: 1705016-002

Analysis began: 6/6/2017

Analyst: Amy Harvey

SOP: AP008MIC Analysis completed: 6/8/2017

No metal particles were found on SEM subsample.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz, gypsum, and salt (sodium chloride).

Sample Number: 1705016-003

Analysis began: 6/6/2017

Analyst: Amy Harvey

SOP: AP007MIC Analysis completed: 6/8/2017

Sample 9 was lightly loaded. The sample contained between 31 and 40% common clays and minerals, between 31 and 40% fungal material, between 5 and 20% plant fibers, and between 5 and 20% plant material. Other particles present in quantities less than 5% included pollen.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Laboratory Analysis Results

Request Number: 1705016

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705016-003

Analysis began: 6/6/2017

Analyst: Amy Harvey

SOP: AP008MIC Analysis completed: 6/8/2017

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz, feldspar, gypsum, and salt (sodium chloride).

Sample Number: 1705016-004

Analysis began: 6/6/2017

Analyst: Amy Harvey

SOP: AP007MIC Analysis completed: 6/8/2017

Sample 10 was moderately loaded. The sample contained less than 5% metal particles. Only two metal particles were found on the subsample. The metal particles ranged in color from reddish to black and ranged in size from 2 - 40 μm . The sample also contained between 61 and 70% fungal spores, between 21 and 30% common clays and minerals, and between 5 and 20% plant fibers. Other particles present in quantities less than 5% included spider web.

Sample Number: 1705016-004

Analysis began: 6/6/2017

Analyst: Amy Harvey

SOP: AP008MIC Analysis completed: 6/8/2017

EDS analysis of a metal particle showed elements carbon, oxygen, sodium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were carbon, oxygen, and iron. This x-ray spectrum of a metal particle is consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as limestone, feldspar, and gypsum.

Sample Number: 1705016-005

Analysis began: 6/6/2017

Analyst: Amy Harvey

SOP: AP007MIC Analysis completed: 6/8/2017

Sample W was moderately loaded. The sample contained less than 5% metal particles. Only two metal particles were found on subsample. Metal particles ranged in color from reddish to black and ranged in size from 10 - 45 μm . The sample contained between 71 and 80% common clays and minerals and between 21 and 30% fungal spores. Other particles present in quantities less than 5% included plant fibers, plant stellate hairs, pollen, and rubber dust.

Sample Number: 1705016-005

Analysis began: 6/6/2017

Analyst: Amy Harvey

SOP: AP008MIC Analysis completed: 6/8/2017

No metal particles were found on SEM subsample.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz, limestone, feldspar, and salt (sodium chloride).

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Laboratory Analysis Results

Request Number: 1705016

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1705016-006

Analysis began: 6/6/2017

Analyst: Amy Harvey

SOP: AP007MIC Analysis completed: 6/8/2017

Sample X was heavily loaded. The sample contained less than 5% metal particles. Metal particles ranged in color from reddish to black and ranged in size from 40 - 80 μm . The sample contained between 51 and 60% plant/wood fibers and between 31 and 40% common clays and minerals. Other particles present in quantities less than 5% included fungal spores, animal hair, white paint chips, white paint overspray, plant stellate hairs, pollen, and rubber dust.

Sample Number: 1705016-006

Analysis began: 6/6/2017

Analyst: Amy Harvey

SOP: AP008MIC Analysis completed: 6/8/2017

EDS analysis of a metal particle showed elements carbon, oxygen, calcium, and iron. The primary peak in the x-ray spectrum was iron.

EDS analysis of a second metal particle showed elements carbon, oxygen, silicon, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

These x-ray spectra of metal particles are consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz and limestone.

TCEQ laboratory customer support may be reached at Frank.Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Laboratory Analysis Results

Request Number: 1705016

Analysis Code: AP008MIC

Qualifier Notes:

ND - not detected
NQ - concentration can not be quantified due to possible interferences or coelutions.
SDL - Sample Detection Limit (Limit of Detection adjusted for dilutions).
SQL - Sample Quantitation Limit (Limit of Quantitation adjusted for dilution).
INV - Invalid.
J - Reported concentration is below SDL.
L - Reported concentration is at or above the SDL and is below the lower limit of quantitation.
E - Reported concentration exceeds the upper limit of instrument calibration.
M - Result modified from previous result.
T - Data was not confirmed by a confirmational analysis. Compound and/or results is tentatively identified.
F - Established acceptance criteria was not met due to factors outside the laboratory's control.
H - Not all associated hold time specifications were met. Data may be biased.
C - Sample received with a missing or broken custody seal.
R - Sample received with a missing or incomplete chain of custody.
I - Sample received without a legible unique identifier.
G - Sample received in an improper container.
U - Sample received with insufficient sample volume.
W - Sample received with insufficient preservation.

TCEQ laboratory customer support may be reached at Frank.Martinez@tceq.texas.gov

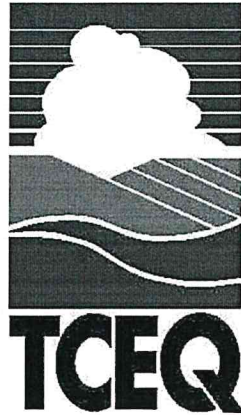
The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Susan Hoelscher

From: Hattie Waites
Sent: Monday, June 12, 2017 4:10 PM
To: Susan Hoelscher
Cc: Frank Martinez
Subject: Request Report 1705016
Attachments: 1705016.pdf

Attached is your PDF file for Request Report 1705016.

You will not receive a hard copy.



**ATTACHMENT 11
Citizen Collected Evidence**

Total Pages: 15

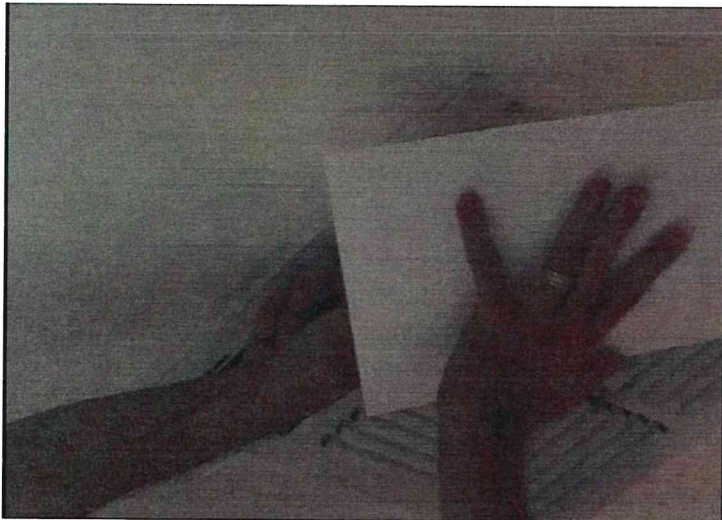
Investigation No. 1415945

**RN106597875
La Quinta Plant**

**CN604261545
Voestalpine Texas LLC**

May 16, 2017 – September 8, 2017

Refer to the
CONFIDENTIAL FILE
for the original
Citizen Collected Evidence
(CCE)
submitted during the course
of
Investigation No. 1415945.



Subject: Collection of metallic particles in
Citizen 43's AC vent inside the kitchen
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (IMG_7646 2.MOV)
Photo No. 1



Subject: Collection of metallic particles from
Citizen 43's AC vent inside the kitchen
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (IMG_7646 2.MOV)
Photo No. 2



Subject: Demonstration of magnetic property
of the metallic particles from Citizen 43's AC
vent inside the kitchen
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: May 19, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (IMG_7646 2.MOV)
Photo No. 3



Subject: Dog bowl (stainless steel) that was cleaned/scrubbed, filled with fresh water, and left in the middle of the Citizen 43's backyard (at ~6 am)
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 7, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (IMG_7686 2.mov)
Photo No. 4



Subject: Demonstration of magnetic property of the metallic particles accumulated in the dog bowl (stainless steel) within ~12 hours (6 am-6 pm) from Citizen 43's backyard
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 7, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (IMG_7686 2.mov)
Photo No. 4



Subject: Demonstration of magnetic property of the metallic particles accumulated in the dog bowl (stainless steel) within ~12 hours (6 am-6 pm) from Citizen 43's backyard
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 7, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (IMG_7686 2.mov)
Photo No. 5



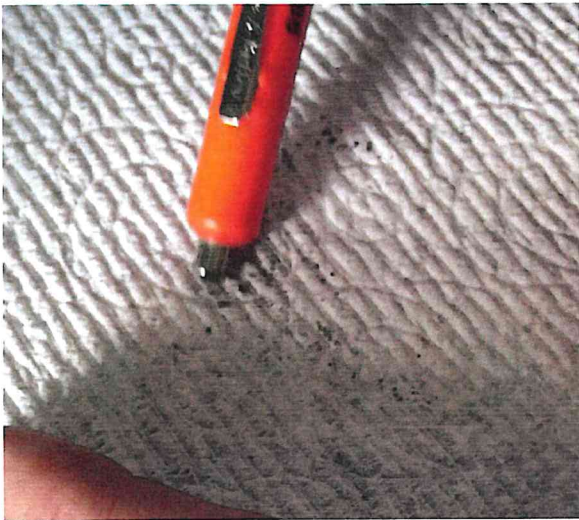
Subject: Collection of metallic particles from Citizen 43's vehicle which had been detailed a week before (Thursday, June 8, 2017)
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 15, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (June 15, 2017 Truck Black Dust.mov)
Photo No. 6



Subject: Collection of metallic particles from Citizen 43's vehicle which had been detailed a week before (Thursday, June 8, 2017)
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 15, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (June 15, 2017 Truck Black Dust.mov)
Photo No. 7



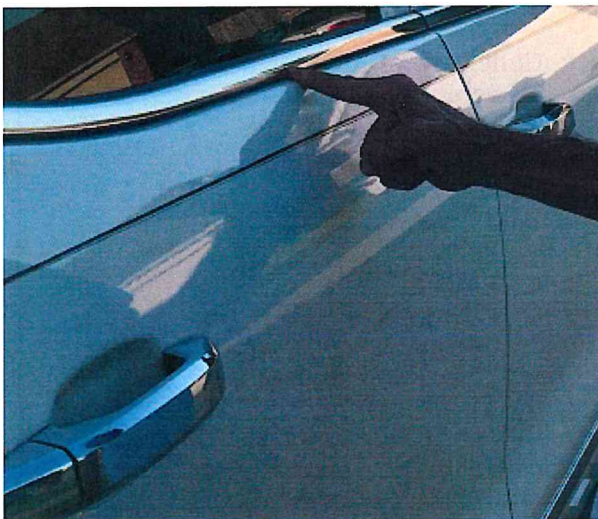
Subject: Accumulation of metallic particles from Citizen 43's vehicle which had been detailed a week before (Thursday, June 8, 2017)
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 15, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (June 15, 2017 Truck Black Dust.mov)
Photo No. 8



Subject: Demonstration of magnetic property of the metallic particles from Citizen 43's vehicle which had been detailed a week before (Thursday, June 8, 2017)
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 15, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (June 15, 2017 Truck Black Dust.mov)
Photo No. 9



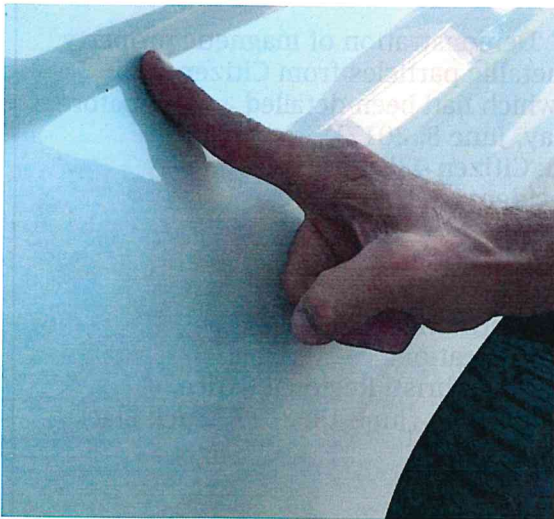
Subject: Demonstration of magnetic property of the metallic particles from Citizen 43's vehicle which had been detailed a week before (Thursday, June 8, 2017)
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 15, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (June 15, 2017 Truck Black Dust.mov)
Photo No. 10



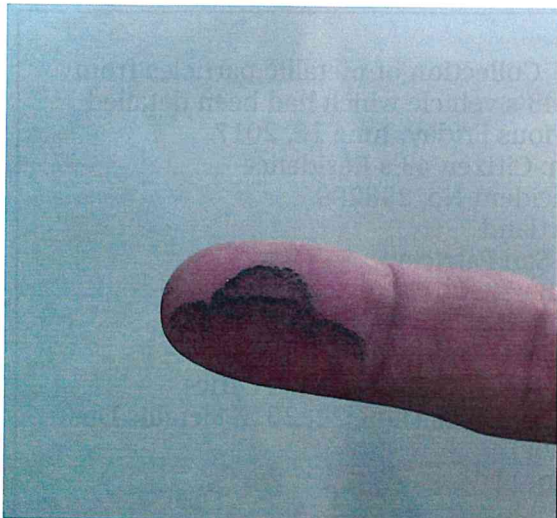
Subject: Collection of metallic particles from Citizen 43's vehicle which had been detailed the previous Friday, June 16, 2017
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 22, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (June 22, 2017 Metallic Dust Video.mov)
Photo No. 11



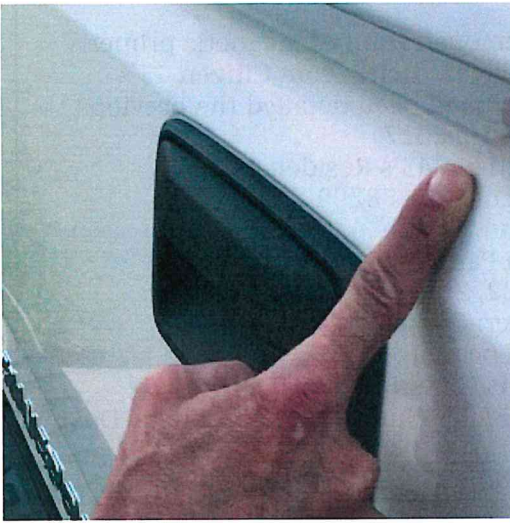
Subject: Collection of metallic particles from Citizen 43's vehicle which had been detailed the previous Friday, June 16, 2017
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 22, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (June 22, 2017 Metallic Dust Video.mov)
Photo No. 12



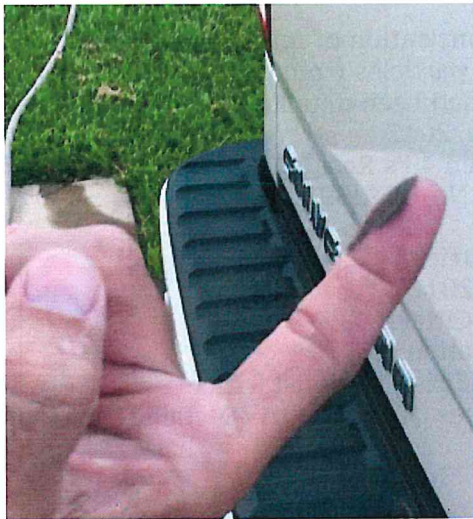
Subject: Collection of metallic particles from Citizen 43's vehicle which had been detailed the previous Friday, June 16, 2017
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 22, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (June 22, 2017 Metallic Dust Video.mov)
Photo No. 13



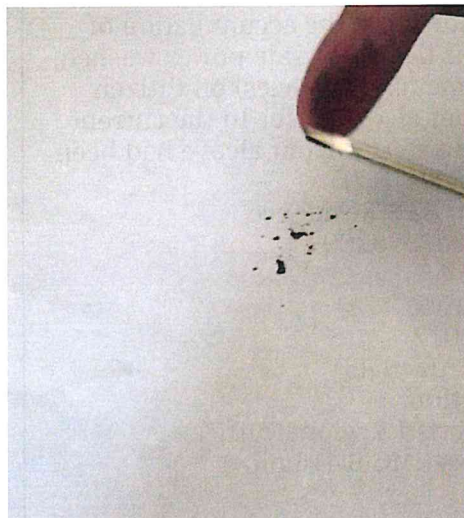
Subject: Collection of metallic particles from Citizen 43's vehicle which had been detailed the previous Friday, June 16, 2017
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 22, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (June 22, 2017 Metallic Dust Video.mov)
Photo No. 14



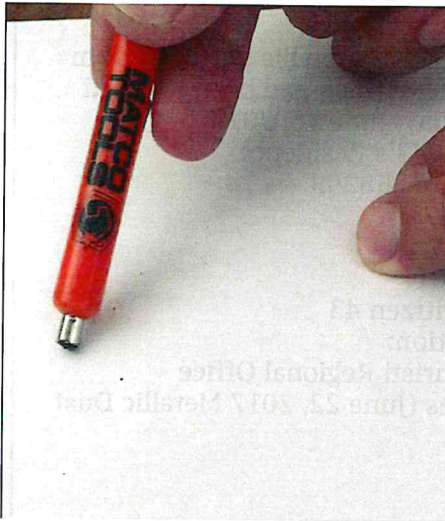
Subject: Collection of metallic particles from Citizen 43's vehicle which had been detailed the previous Friday, June 16, 2017
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 22, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (June 22, 2017 Metallic Dust Video.mov)
Photo No. 15



Subject: Collection of metallic particles from Citizen 43's vehicle which had been detailed the previous Friday, June 16, 2017
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 22, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (June 22, 2017 Metallic Dust Video.mov)
Photo No. 16



Subject: Accumulation of metallic particles from Citizen 43's vehicle which had been detailed the previous Friday, June 16, 2017
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 22, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (June 22, 2017 Metallic Dust Video.mov)
Photo No. 17



Subject: Demonstration of magnetic property of the metallic particles from Citizen 43's vehicle which had been detailed the previous Friday, June 16, 2017
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 22, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (June 22, 2017 Metallic Dust Video.mov)
Photo No. 18



Subject: Demonstration of magnetic property of the metallic particles from Citizen 43's vehicle which had been detailed the previous Friday, June 16, 2017
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 22, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (June 22, 2017 Metallic Dust Video.mov)
Photo No. 19



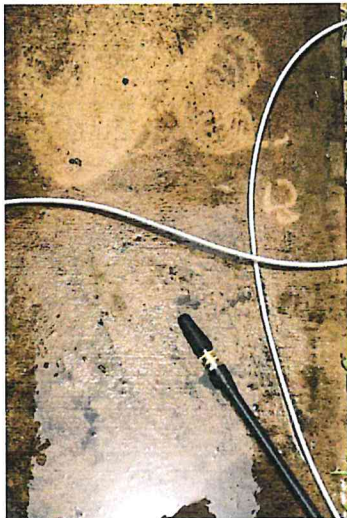
Subject: Line indicating the accumulation of metallic particles (left light side power washed; right dark side metallic particles) on Citizen 43's exterior front alcove (prior to the current power wash, the exterior front alcove had been cleaned in January 2017)
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 24, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (IMG_1415.mov)
Photo No. 20



Subject: Demonstration of magnetic property of the accumulated metallic particles power washed from Citizen 43's exterior front alcove
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 24, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (IMG_1415.mov)
Photo No. 21



Subject: Demonstration of magnetic property of the accumulated metallic particles power washed from Citizen 43's exterior front alcove
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 24, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (IMG_1415.mov)
Photo No. 22



Subject: Accumulation of metallic particles on Citizen 43's front sidewalk (top light area power washed, bottom dark area metallic particles)
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 24, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (IMG_1416.mov)
Photo No. 23



Subject: Demonstration of magnetic property of the accumulated metallic particles power washed from Citizen 43's front sidewalk
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 24, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (IMG_1416.mov)
Photo No. 24



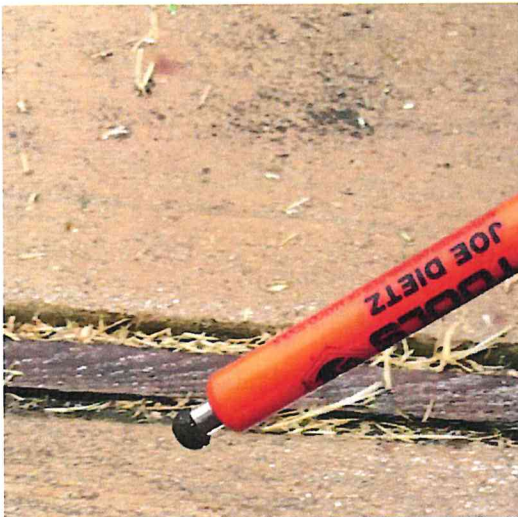
Subject: Demonstration of magnetic property of the accumulated metallic particles power washed from Citizen 43's front sidewalk
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 24, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (IMG_1416.mov)
Photo No. 25



Subject: Line indicating the accumulation of metallic particles on Citizen 43's front sidewalk (top dark area metallic particles, bottom light area power washed)
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 24, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (IMG_1417.mov)
Photo No. 26



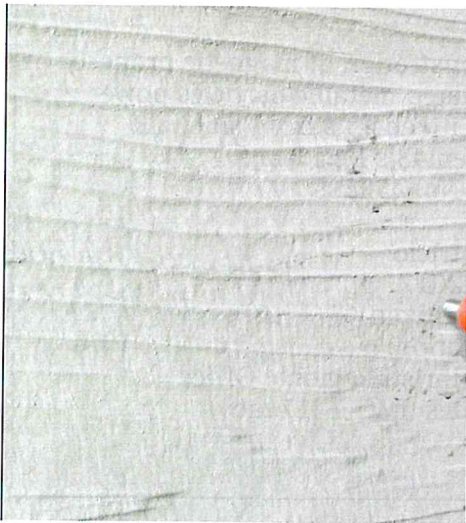
Subject: Demonstration of magnetic property of the accumulated metallic particles power washed from Citizen 43's front sidewalk
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 24, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (IMG_1417.mov)
Photo No. 27



Subject: Demonstration of magnetic property of the accumulated metallic particles power washed from Citizen 43's front sidewalk
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 24, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (IMG_1417.mov)
Photo No. 28



Subject: Demonstration of magnetic property of the accumulated metallic particles on Citizen 43's front sidewalk after power washing the exterior front alcove and front sidewalk twice
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 24, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (IMG_1420.mov)
Photo No. 29



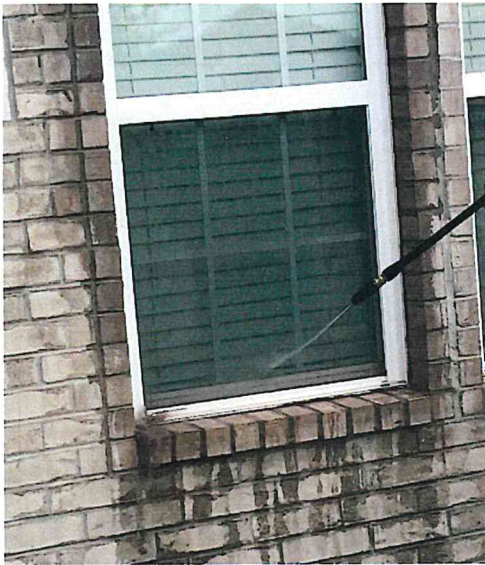
Subject: Demonstration of magnetic property of the embedded metallic particles on Citizen 43's front siding after power washing twice (prior to the current power washing, the siding was cleaned and painted in January 2017)
 Location: Citizen 43's Residence
 TCEQ Incident No. 258299
 City: Portland
 County: San Patricio
 Date: June 24, 2017
 Photographer: Citizen 43
 Digital File Location:
 TCEQ Corpus Christi Regional Office
 Confidential Files (IMG_1424.mov)
 Photo No. 30



Subject: Demonstration of magnetic property of the embedded metallic particles on Citizen 43's front siding after power washing twice (prior to the current power washing, the siding was cleaned and painted in January 2017)
 Location: Citizen 43's Residence
 TCEQ Incident No. 258299
 City: Portland
 County: San Patricio
 Date: June 24, 2017
 Photographer: Citizen 43
 Digital File Location:
 TCEQ Corpus Christi Regional Office
 Confidential Files (IMG_1424.mov)
 Photo No. 31



Subject: Demonstration of accumulation of metallic particles on Citizen 43's back patio (left light area power washed, right dark area metallic particles)
 Location: Citizen 43's Residence
 TCEQ Incident No. 258299
 City: Portland
 County: San Patricio
 Date: June 24, 2017
 Photographer: Citizen 43
 Digital File Location:
 TCEQ Corpus Christi Regional Office
 Confidential Files (IMG_7756.mov)
 Photo No. 32



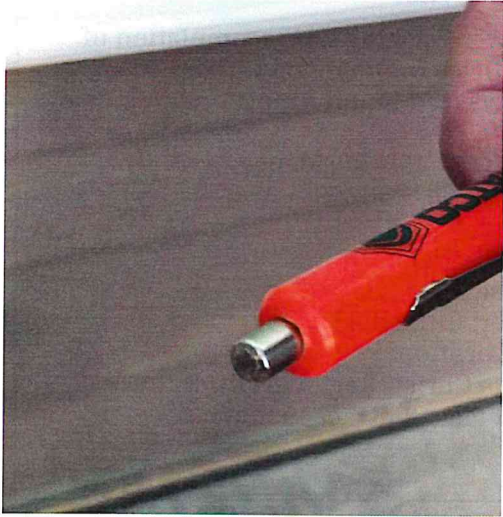
Subject: Power washing the accumulation of metallic particles (reddish) on Citizen 43's front windows (red liquid runoff on left side of window sill)
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: June 24, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (IMG_7749.mov)
Photo No. 33



Subject: Collection of metallic particles on Citizen 43's back patio window sill which had been power washed on June 24, 2017
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: July 12, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (7/12/17 Back Patio.mov)
Photo No. 34



Subject: Demonstration of magnetic property of the accumulated metallic particles on Citizen 43's back patio window sill which had been power washed on June 24, 2017
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: July 12, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (7/12/17 Back Patio.mov)
Photo No. 35



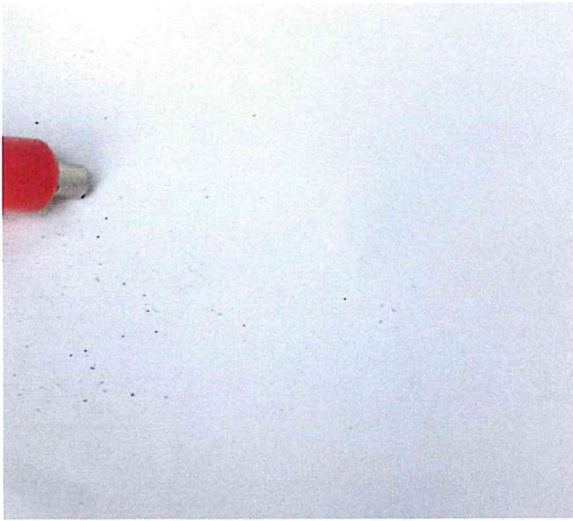
Subject: Demonstration of magnetic property of the accumulated metallic particles on Citizen 43's back patio window sill and electrical box which had been power washed on June 24, 2017
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: July 12, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (7/12/17 Back Patio.mov)
Photo No. 36



Subject: Collection of metallic particles on Citizen 43's front window sill which had been power washed on June 24, 2017
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: July 12, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (7/12/17 Front Yard.mov)
Photo No. 37



Subject: Collection of metallic particles on Citizen 43's front window sill which had been power washed on June 24, 2017
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: July 12, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (7/12/17 Front Yard.mov)
Photo No. 38



Subject: Demonstration of magnetic property of the accumulated metallic particles on Citizen 43's front window sill which had been power washed on June 24, 2017
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: July 12, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (7/12/17 Front Yard.mov)
Photo No. 39



Subject: Demonstration of magnetic property of the accumulated metallic particles on Citizen 43's front window sill which had been power washed on June 24, 2017
Location: Citizen 43's Residence
TCEQ Incident No. 258299
City: Portland
County: San Patricio
Date: July 12, 2017
Photographer: Citizen 43
Digital File Location:
TCEQ Corpus Christi Regional Office
Confidential Files (7/12/17 Front Yard.mov)
Photo No. 40



ATTACHMENT 12
TCEQ Heavy Metal Sample Results

Total Pages: 28

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 - September 8, 2017



10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

July 05, 2017

Kendra Bernhagen
Texas Commission on Environmental Quality
6300 Ocean Drive Unit 5839
NRC Building Suite 1200
Corpus Christi, TX 78412

Work Order: **HS17051351**

Laboratory Results for: **TCEQ Region 14 COC 51689**

Dear Kendra,

ALS Environmental received 10 sample(s) on May 25, 2017 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: Jumoke.Lawal
Dane J. Wacasey

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 Work Order: HS17051351

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS17051351-01	-01-Remet Pile	Solid		24-May-2017 10:50	25-May-2017 08:30	<input type="checkbox"/>
HS17051351-02	-02-HBI Chips & Fines	Solid		24-May-2017 10:55	25-May-2017 08:30	<input type="checkbox"/>
HS17051351-03	-03-Remet/Fines/Iron Oxide Pellets	Solid		24-May-2017 11:05	25-May-2017 08:30	<input type="checkbox"/>
HS17051351-04	-04-HBI Fines	Solid		24-May-2017 11:20	25-May-2017 08:30	<input type="checkbox"/>
HS17051351-05	-05-Remet & HBI Fines	Solid		24-May-2017 11:30	25-May-2017 08:30	<input type="checkbox"/>
HS17051351-06	-06-Iron Oxide Fines	Solid		24-May-2017 11:35	25-May-2017 08:30	<input type="checkbox"/>
HS17051351-07	-07-Coated Iron Oxide Pellets	Solid		24-May-2017 11:45	25-May-2017 08:30	<input type="checkbox"/>
HS17051351-08	-08-Iron Oxide Pellets	Solid		24-May-2017 11:50	25-May-2017 08:30	<input type="checkbox"/>
HS17051351-09	-09-HBI Fines Cold Briquettes	Solid		24-May-2017 11:55	25-May-2017 08:30	<input type="checkbox"/>
HS17051351-10	-010-HBI Fines	Solid		24-May-2017 12:00	25-May-2017 08:30	<input type="checkbox"/>

Client: Texas Commission on Environmental Quality
Project: TCEQ Region 14 COC 51689
Work Order: HS17051351

CASE NARRATIVE

Metals by Method SW6020

Batch ID: 116664

Sample ID: -01-Remet Pile (HS17051351-01)

- Sample ran at a 50x due to high Iron concentration.

Sample ID: -010-HBI Fines (HS17051351-10)

- Sample ran at a 10x due to high Iron concentration.

Sample ID: -02-HBI Chips & Fines (HS17051351-02)

- Sample ran at a 50x due to high Iron concentration.

Sample ID: -03-Remet/Fines/Iron Oxide Pellets (HS17051351-03)

- Sample ran at a 10x due to high Iron concentration.

Sample ID: -04-HBI Fines (HS17051351-04)

- Sample ran at a 10x due to high Iron concentration.

Sample ID: -05-Remet & HBI Fines (HS17051351-05)

- Sample ran at a 5x due to high Iron concentration.

Sample ID: -06-Iron Oxide Fines (HS17051351-06)

- Sample ran at a 5x due to high Iron concentration.

Sample ID: -09-HBI Fines Cold Briquettes (HS17051351-09)

- Sample ran at a 10x due to high Iron concentration.

Sample ID: HS17051306-07MS

- MS/MSD and DUPs are for an unrelated sample

Metals by Method SW7471A

Batch ID: 116660

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
-

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 Sample ID: -01-Remet Pile
 Collection Date: 24-May-2017 10:50

ANALYTICAL REPORT
 WorkOrder:HS17051351
 Lab ID:HS17051351-01
 Matrix:Solid

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY SW6020A		Method:SW6020		Prep:SW3050A / 30-May-2017		Analyst: JDE
Aluminum	424		9.40	mg/Kg	50	31-May-2017 18:17
Antimony	< 4.70		4.70	mg/Kg	50	31-May-2017 18:17
Arsenic	< 4.70		4.70	mg/Kg	50	30-May-2017 21:08
Barium	14.3		4.70	mg/Kg	50	30-May-2017 21:08
Beryllium	< 4.70		4.70	mg/Kg	50	30-May-2017 21:08
Cadmium	< 4.70		4.70	mg/Kg	50	30-May-2017 21:08
Calcium	752		470	mg/Kg	50	30-May-2017 21:08
Chromium	35.9		4.70	mg/Kg	50	30-May-2017 21:08
Cobalt	< 4.70		4.70	mg/Kg	50	30-May-2017 21:08
Copper	3.63		1.88	mg/Kg	50	30-May-2017 21:08
Iron	401,000		4700	mg/Kg	500	31-May-2017 15:16
Lead	< 4.70		4.70	mg/Kg	50	30-May-2017 21:08
Magnesium	< 470		470	mg/Kg	50	30-May-2017 21:08
Manganese	164		4.70	mg/Kg	50	30-May-2017 21:08
Molybdenum	< 4.70		4.70	mg/Kg	50	30-May-2017 21:08
Nickel	< 4.70		4.70	mg/Kg	50	30-May-2017 21:08
Potassium	< 470		470	mg/Kg	50	30-May-2017 21:08
Selenium	< 4.70		4.70	mg/Kg	50	30-May-2017 21:08
Silver	< 4.70		4.70	mg/Kg	50	30-May-2017 21:08
Sodium	< 470		470	mg/Kg	50	30-May-2017 21:08
Strontium	6.69		4.70	mg/Kg	50	30-May-2017 21:08
Thallium	< 4.70		4.70	mg/Kg	50	30-May-2017 21:08
Tin	< 4.70		4.70	mg/Kg	50	30-May-2017 21:08
Titanium	90.9		4.70	mg/Kg	50	30-May-2017 21:08
Vanadium	7.56		4.70	mg/Kg	50	30-May-2017 21:08
Zinc	< 4.70		4.70	mg/Kg	50	30-May-2017 21:08

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 Sample ID: -02-HBI Chips & Fines
 Collection Date: 24-May-2017 10:55

ANALYTICAL REPORT
 WorkOrder:HS17051351
 Lab ID:HS17051351-02
 Matrix:Solid

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY SW6020A		Method:SW6020			Prep:SW3050A / 30-May-2017	Analyst: JDE
Aluminum	1,400		27.8	mg/Kg	50	31-May-2017 18:22
Antimony	< 13.9		13.9	mg/Kg	50	31-May-2017 18:22
Arsenic	< 13.9		13.9	mg/Kg	50	30-May-2017 21:13
Barium	20.5		13.9	mg/Kg	50	30-May-2017 21:13
Beryllium	< 13.9		13.9	mg/Kg	50	30-May-2017 21:13
Cadmium	< 13.9		13.9	mg/Kg	50	30-May-2017 21:13
Calcium	2,150		1390	mg/Kg	50	30-May-2017 21:13
Chromium	140		13.9	mg/Kg	50	30-May-2017 21:13
Cobalt	< 13.9		13.9	mg/Kg	50	30-May-2017 21:13
Copper	< 5.55		5.55	mg/Kg	50	30-May-2017 21:13
Iron	719,000		13900	mg/Kg	500	31-May-2017 15:20
Lead	< 13.9		13.9	mg/Kg	50	30-May-2017 21:13
Magnesium	< 1390		1390	mg/Kg	50	30-May-2017 21:13
Manganese	385		13.9	mg/Kg	50	30-May-2017 21:13
Molybdenum	< 13.9		13.9	mg/Kg	50	30-May-2017 21:13
Nickel	< 13.9		13.9	mg/Kg	50	30-May-2017 21:13
Potassium	< 1390		1390	mg/Kg	50	30-May-2017 21:13
Selenium	< 13.9		13.9	mg/Kg	50	30-May-2017 21:13
Silver	< 13.9		13.9	mg/Kg	50	30-May-2017 21:13
Sodium	< 1390		1390	mg/Kg	50	30-May-2017 21:13
Strontium	17.9		13.9	mg/Kg	50	30-May-2017 21:13
Thallium	< 13.9		13.9	mg/Kg	50	30-May-2017 21:13
Tin	< 13.9		13.9	mg/Kg	50	30-May-2017 21:13
Titanium	349		13.9	mg/Kg	50	30-May-2017 21:13
Vanadium	51.0		13.9	mg/Kg	50	30-May-2017 21:13
Zinc	< 13.9		13.9	mg/Kg	50	30-May-2017 21:13

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 Sample ID: -03-Remet/Fines/Iron Oxide Pellets
 Collection Date: 24-May-2017 11:05

ANALYTICAL REPORT
 WorkOrder:HS17051351
 Lab ID:HS17051351-03
 Matrix:Solid

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY SW6020A		Method:SW6020		Prep:SW3050A / 30-May-2017		Analyst: JDE
Aluminum	1,530		9.43	mg/Kg	10	31-May-2017 18:35
Antimony	< 4.72		4.72	mg/Kg	10	31-May-2017 18:35
Arsenic	< 4.72		4.72	mg/Kg	10	30-May-2017 21:17
Barium	31.7		4.72	mg/Kg	10	30-May-2017 21:17
Beryllium	< 4.72		4.72	mg/Kg	10	30-May-2017 21:17
Cadmium	< 4.72		4.72	mg/Kg	10	30-May-2017 21:17
Calcium	4,940		472	mg/Kg	10	30-May-2017 21:17
Chromium	156		4.72	mg/Kg	10	30-May-2017 21:17
Cobalt	< 4.72		4.72	mg/Kg	10	30-May-2017 21:17
Copper	4.57		1.89	mg/Kg	10	30-May-2017 21:17
Iron	748,000		4720	mg/Kg	100	31-May-2017 15:34
Lead	< 4.72		4.72	mg/Kg	10	30-May-2017 21:17
Magnesium	< 472		472	mg/Kg	10	30-May-2017 21:17
Manganese	452		4.72	mg/Kg	10	30-May-2017 21:17
Molybdenum	< 4.72		4.72	mg/Kg	10	30-May-2017 21:17
Nickel	6.15		4.72	mg/Kg	10	30-May-2017 21:17
Potassium	< 472		472	mg/Kg	10	30-May-2017 21:17
Selenium	< 4.72		4.72	mg/Kg	10	30-May-2017 21:17
Silver	< 4.72		4.72	mg/Kg	10	30-May-2017 21:17
Sodium	< 472		472	mg/Kg	10	30-May-2017 21:17
Strontium	25.2		4.72	mg/Kg	10	30-May-2017 21:17
Thallium	< 4.72		4.72	mg/Kg	10	30-May-2017 21:17
Tin	< 4.72		4.72	mg/Kg	10	30-May-2017 21:17
Titanium	353		4.72	mg/Kg	10	30-May-2017 21:17
Vanadium	58.9		4.72	mg/Kg	10	30-May-2017 21:17
Zinc	4.81		4.72	mg/Kg	10	30-May-2017 21:17

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 Sample ID: -04-HBI Fines
 Collection Date: 24-May-2017 11:20

ANALYTICAL REPORT
 WorkOrder:HS17051351
 Lab ID:HS17051351-04
 Matrix:Solid

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY SW6020A		Method:SW6020		Prep:SW3050A / 30-May-2017		Analyst: JDE
Aluminum	1,570		9.54	mg/Kg	10	31-May-2017 18:40
Antimony	< 4.77		4.77	mg/Kg	10	31-May-2017 18:40
Arsenic	< 4.77		4.77	mg/Kg	10	30-May-2017 21:22
Barium	34.4		4.77	mg/Kg	10	30-May-2017 21:22
Beryllium	< 4.77		4.77	mg/Kg	10	30-May-2017 21:22
Cadmium	< 4.77		4.77	mg/Kg	10	30-May-2017 21:22
Calcium	7,000		477	mg/Kg	10	30-May-2017 21:22
Chromium	107		4.77	mg/Kg	10	30-May-2017 21:22
Cobalt	28.6		4.77	mg/Kg	10	30-May-2017 21:22
Copper	7.06		1.91	mg/Kg	10	30-May-2017 21:22
Iron	677,000		4770	mg/Kg	100	31-May-2017 15:38
Lead	< 4.77		4.77	mg/Kg	10	30-May-2017 21:22
Magnesium	1,410		477	mg/Kg	10	30-May-2017 21:22
Manganese	570		4.77	mg/Kg	10	30-May-2017 21:22
Molybdenum	< 4.77		4.77	mg/Kg	10	30-May-2017 21:22
Nickel	69.9		4.77	mg/Kg	10	30-May-2017 21:22
Potassium	< 477		477	mg/Kg	10	30-May-2017 21:22
Selenium	< 4.77		4.77	mg/Kg	10	30-May-2017 21:22
Silver	< 4.77		4.77	mg/Kg	10	30-May-2017 21:22
Sodium	< 477		477	mg/Kg	10	30-May-2017 21:22
Strontium	25.6		4.77	mg/Kg	10	30-May-2017 21:22
Thallium	< 4.77		4.77	mg/Kg	10	30-May-2017 21:22
Tin	< 4.77		4.77	mg/Kg	10	30-May-2017 21:22
Titanium	520		4.77	mg/Kg	10	30-May-2017 21:22
Vanadium	430		4.77	mg/Kg	10	30-May-2017 21:22
Zinc	16.5		4.77	mg/Kg	10	30-May-2017 21:22
MERCURY BY SW7471B		Method:SW7471A		Prep:SW7471A / 30-May-2017		Analyst: JC
Mercury	< 0.00355		0.00355	mg/Kg	1	30-May-2017 16:45

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 Sample ID: -05-Remet & HBI Fines
 Collection Date: 24-May-2017 11:30

ANALYTICAL REPORT
 WorkOrder:HS17051351
 Lab ID:HS17051351-05
 Matrix:Solid

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY SW6020A		Method:SW6020			Prep:SW3050A / 30-May-2017	Analyst: JDE
Aluminum	2,090		91.7	mg/Kg	100	31-May-2017 15:43
Antimony	< 2.29		2.29	mg/Kg	5	31-May-2017 18:44
Arsenic	3.02		2.29	mg/Kg	5	31-May-2017 18:44
Barium	25.3		2.29	mg/Kg	5	31-May-2017 18:44
Beryllium	< 2.29		2.29	mg/Kg	5	31-May-2017 18:44
Cadmium	< 2.29		2.29	mg/Kg	5	31-May-2017 18:44
Calcium	9,590		229	mg/Kg	5	31-May-2017 18:44
Chromium	42.1		2.29	mg/Kg	5	31-May-2017 18:44
Cobalt	< 2.29		2.29	mg/Kg	5	31-May-2017 18:44
Copper	3.23		0.917	mg/Kg	5	31-May-2017 18:44
Iron	82,100		4590	mg/Kg	100	31-May-2017 15:43
Lead	< 2.29		2.29	mg/Kg	5	31-May-2017 18:44
Magnesium	987		229	mg/Kg	5	31-May-2017 18:44
Manganese	198		2.29	mg/Kg	5	31-May-2017 18:44
Molybdenum	< 2.29		2.29	mg/Kg	5	31-May-2017 18:44
Nickel	2.68		2.29	mg/Kg	5	31-May-2017 18:44
Potassium	< 229		229	mg/Kg	5	31-May-2017 18:44
Selenium	< 2.29		2.29	mg/Kg	5	31-May-2017 18:44
Silver	< 2.29		2.29	mg/Kg	5	31-May-2017 18:44
Sodium	< 229		229	mg/Kg	5	31-May-2017 18:44
Strontium	19.8		2.29	mg/Kg	5	31-May-2017 18:44
Thallium	< 2.29		2.29	mg/Kg	5	31-May-2017 18:44
Tin	< 2.29		2.29	mg/Kg	5	31-May-2017 18:44
Titanium	51.2		2.29	mg/Kg	5	31-May-2017 18:44
Vanadium	20.2		2.29	mg/Kg	5	31-May-2017 18:44
Zinc	5.64		2.29	mg/Kg	5	31-May-2017 18:44
MERCURY BY SW7471B		Method:SW7471A			Prep:SW7471A / 30-May-2017	Analyst: JC
Mercury	< 0.00359		0.00359	mg/Kg	1	30-May-2017 16:49

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 Sample ID: -06-Iron Oxide Fines
 Collection Date: 24-May-2017 11:35

ANALYTICAL REPORT
 WorkOrder:HS17051351
 Lab ID:HS17051351-06
 Matrix:Solid

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY SW6020A		Method:SW6020		Prep:SW3050A / 30-May-2017		Analyst: JDE
Aluminum	2,810		95.2	mg/Kg	100	31-May-2017 15:48
Antimony	< 2.38		2.38	mg/Kg	5	31-May-2017 18:49
Arsenic	2.78		2.38	mg/Kg	5	31-May-2017 18:49
Barium	28.1		2.38	mg/Kg	5	31-May-2017 18:49
Beryllium	< 2.38		2.38	mg/Kg	5	31-May-2017 18:49
Cadmium	< 2.38		2.38	mg/Kg	5	31-May-2017 18:49
Calcium	15,100		238	mg/Kg	5	31-May-2017 18:49
Chromium	34.3		2.38	mg/Kg	5	31-May-2017 18:49
Cobalt	7.74		2.38	mg/Kg	5	31-May-2017 18:49
Copper	3.17		0.952	mg/Kg	5	31-May-2017 18:49
Iron	122,000		4760	mg/Kg	100	31-May-2017 15:48
Lead	7.06		2.38	mg/Kg	5	31-May-2017 18:49
Magnesium	1,150		238	mg/Kg	5	31-May-2017 18:49
Manganese	232		2.38	mg/Kg	5	31-May-2017 18:49
Molybdenum	< 2.38		2.38	mg/Kg	5	31-May-2017 18:49
Nickel	19.2		2.38	mg/Kg	5	31-May-2017 18:49
Potassium	< 238		238	mg/Kg	5	31-May-2017 18:49
Selenium	< 2.38		2.38	mg/Kg	5	31-May-2017 18:49
Silver	< 2.38		2.38	mg/Kg	5	31-May-2017 18:49
Sodium	< 238		238	mg/Kg	5	31-May-2017 18:49
Strontium	23.3		2.38	mg/Kg	5	31-May-2017 18:49
Thallium	< 2.38		2.38	mg/Kg	5	31-May-2017 18:49
Tin	< 2.38		2.38	mg/Kg	5	31-May-2017 18:49
Titanium	88.3		2.38	mg/Kg	5	31-May-2017 18:49
Vanadium	110		2.38	mg/Kg	5	31-May-2017 18:49
Zinc	8.43		2.38	mg/Kg	5	31-May-2017 18:49
MERCURY BY SW7471B		Method:SW7471A		Prep:SW7471A / 30-May-2017		Analyst: JC
Mercury	0.00382		0.00347	mg/Kg	1	30-May-2017 16:51

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 Sample ID: -07-Coated Iron Oxide Pellets
 Collection Date: 24-May-2017 11:45

ANALYTICAL REPORT
 WorkOrder:HS17051351
 Lab ID:HS17051351-07
 Matrix:Solid

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY SW6020A		Method:SW6020		Prep:SW3050A / 30-May-2017		Analyst: JDE
Aluminum	420		7.20	mg/Kg	10	31-May-2017 15:52
Antimony	< 0.360		0.360	mg/Kg	1	31-May-2017 18:53
Arsenic	1.35		0.360	mg/Kg	1	31-May-2017 18:53
Barium	36.4		0.360	mg/Kg	1	31-May-2017 18:53
Beryllium	< 0.360		0.360	mg/Kg	1	31-May-2017 18:53
Cadmium	< 0.360		0.360	mg/Kg	1	31-May-2017 18:53
Calcium	8,990		36.0	mg/Kg	1	31-May-2017 18:53
Chromium	6.41		0.360	mg/Kg	1	31-May-2017 18:53
Cobalt	0.643		0.360	mg/Kg	1	31-May-2017 18:53
Copper	1.74		0.144	mg/Kg	1	31-May-2017 18:53
Iron	17,200		360	mg/Kg	10	31-May-2017 15:52
Lead	1.74		0.360	mg/Kg	1	31-May-2017 18:53
Magnesium	759		36.0	mg/Kg	1	31-May-2017 18:53
Manganese	61.2		0.360	mg/Kg	1	31-May-2017 18:53
Molybdenum	0.884		0.360	mg/Kg	1	31-May-2017 18:53
Nickel	1.65		0.360	mg/Kg	1	31-May-2017 18:53
Potassium	49.4		36.0	mg/Kg	1	31-May-2017 18:53
Selenium	< 0.360		0.360	mg/Kg	1	31-May-2017 18:53
Silver	< 0.360		0.360	mg/Kg	1	31-May-2017 18:53
Sodium	109		36.0	mg/Kg	1	31-May-2017 18:53
Strontium	17.0		0.360	mg/Kg	1	31-May-2017 18:53
Thallium	< 0.360		0.360	mg/Kg	1	31-May-2017 18:53
Tin	< 0.360		0.360	mg/Kg	1	31-May-2017 18:53
Titanium	9.20		0.360	mg/Kg	1	31-May-2017 18:53
Vanadium	13.9		0.360	mg/Kg	1	31-May-2017 18:53
Zinc	3.06		0.360	mg/Kg	1	31-May-2017 18:53

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 Sample ID: -08-Iron Oxide Pellets
 Collection Date: 24-May-2017 11:50

ANALYTICAL REPORT
 WorkOrder:HS17051351
 Lab ID:HS17051351-08
 Matrix:Solid

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY SW6020A		Method:SW6020		Prep:SW3050A / 30-May-2017		Analyst: JDE
Aluminum	414		6.25	mg/Kg	10	31-May-2017 15:57
Antimony	< 0.313		0.313	mg/Kg	1	31-May-2017 18:58
Arsenic	2.07		0.313	mg/Kg	1	31-May-2017 18:58
Barium	27.0		0.313	mg/Kg	1	31-May-2017 18:58
Beryllium	< 0.313		0.313	mg/Kg	1	31-May-2017 18:58
Cadmium	< 0.313		0.313	mg/Kg	1	31-May-2017 18:58
Calcium	12,800		313	mg/Kg	10	31-May-2017 15:57
Chromium	5.86		0.313	mg/Kg	1	31-May-2017 18:58
Cobalt	0.564		0.313	mg/Kg	1	31-May-2017 18:58
Copper	1.34		0.125	mg/Kg	1	31-May-2017 18:58
Iron	15,800		313	mg/Kg	10	31-May-2017 15:57
Lead	1.11		0.313	mg/Kg	1	31-May-2017 18:58
Magnesium	901		31.3	mg/Kg	1	31-May-2017 18:58
Manganese	48.4		0.313	mg/Kg	1	31-May-2017 18:58
Molybdenum	1.15		0.313	mg/Kg	1	31-May-2017 18:58
Nickel	1.38		0.313	mg/Kg	1	31-May-2017 18:58
Potassium	58.6		31.3	mg/Kg	1	31-May-2017 18:58
Selenium	< 0.313		0.313	mg/Kg	1	31-May-2017 18:58
Silver	< 0.313		0.313	mg/Kg	1	31-May-2017 18:58
Sodium	109		31.3	mg/Kg	1	31-May-2017 18:58
Strontium	21.8		0.313	mg/Kg	1	31-May-2017 18:58
Thallium	< 0.313		0.313	mg/Kg	1	31-May-2017 18:58
Tin	< 0.313		0.313	mg/Kg	1	31-May-2017 18:58
Titanium	6.61		0.313	mg/Kg	1	31-May-2017 18:58
Vanadium	23.9		0.313	mg/Kg	1	31-May-2017 18:58
Zinc	3.09		0.313	mg/Kg	1	31-May-2017 18:58

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 Sample ID: -09-HBI Fines Cold Briquettes
 Collection Date: 24-May-2017 11:55

ANALYTICAL REPORT
 WorkOrder:HS17051351
 Lab ID:HS17051351-09
 Matrix:Solid

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY SW6020A		Method:SW6020		Prep:SW3050A / 30-May-2017		Analyst: JDE
Aluminum	4,010		92.0	mg/Kg	100	31-May-2017 16:01
Antimony	< 4.60		4.60	mg/Kg	10	31-May-2017 19:02
Arsenic	< 4.60		4.60	mg/Kg	10	30-May-2017 21:45
Barium	35.4		4.60	mg/Kg	10	30-May-2017 21:45
Beryllium	< 4.60		4.60	mg/Kg	10	30-May-2017 21:45
Cadmium	< 4.60		4.60	mg/Kg	10	30-May-2017 21:45
Calcium	12,000		460	mg/Kg	10	30-May-2017 21:45
Chromium	98.1		4.60	mg/Kg	10	30-May-2017 21:45
Cobalt	25.2		4.60	mg/Kg	10	30-May-2017 21:45
Copper	6.58		1.84	mg/Kg	10	30-May-2017 21:45
Iron	555,000		4600	mg/Kg	100	31-May-2017 16:01
Lead	86.1		4.60	mg/Kg	10	30-May-2017 21:45
Magnesium	2,280		460	mg/Kg	10	30-May-2017 21:45
Manganese	495		4.60	mg/Kg	10	30-May-2017 21:45
Molybdenum	< 4.60		4.60	mg/Kg	10	30-May-2017 21:45
Nickel	63.8		4.60	mg/Kg	10	30-May-2017 21:45
Potassium	< 460		460	mg/Kg	10	30-May-2017 21:45
Selenium	< 4.60		4.60	mg/Kg	10	30-May-2017 21:45
Silver	< 4.60		4.60	mg/Kg	10	30-May-2017 21:45
Sodium	< 460		460	mg/Kg	10	30-May-2017 21:45
Strontium	28.4		4.60	mg/Kg	10	30-May-2017 21:45
Thallium	< 4.60		4.60	mg/Kg	10	30-May-2017 21:45
Tin	10.6		4.60	mg/Kg	10	30-May-2017 21:45
Titanium	460		4.60	mg/Kg	10	30-May-2017 21:45
Vanadium	434		4.60	mg/Kg	10	30-May-2017 21:45
Zinc	21.4		4.60	mg/Kg	10	30-May-2017 21:45
MERCURY BY SW7471B		Method:SW7471A		Prep:SW7471A / 30-May-2017		Analyst: JC
Mercury	< 0.00360		0.00360	mg/Kg	1	30-May-2017 16:52

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 Sample ID: -010-HBI Fines
 Collection Date: 24-May-2017 12:00

ANALYTICAL REPORT
 WorkOrder:HS17051351
 Lab ID:HS17051351-10
 Matrix:Solid

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY SW6020A		Method:SW6020		Prep:SW3050A / 30-May-2017		Analyst: JDE
Aluminum	4,600		92.4	mg/Kg	100	31-May-2017 16:06
Antimony	< 4.62		4.62	mg/Kg	10	31-May-2017 19:07
Arsenic	5.15		4.62	mg/Kg	10	30-May-2017 21:50
Barium	28.0		4.62	mg/Kg	10	30-May-2017 21:50
Beryllium	< 4.62		4.62	mg/Kg	10	30-May-2017 21:50
Cadmium	< 4.62		4.62	mg/Kg	10	30-May-2017 21:50
Calcium	9,680		462	mg/Kg	10	30-May-2017 21:50
Chromium	120		4.62	mg/Kg	10	30-May-2017 21:50
Cobalt	6.07		4.62	mg/Kg	10	30-May-2017 21:50
Copper	5.81		1.85	mg/Kg	10	30-May-2017 21:50
Iron	590,000		4620	mg/Kg	100	31-May-2017 16:06
Lead	89.9		4.62	mg/Kg	10	30-May-2017 21:50
Magnesium	< 462		462	mg/Kg	10	30-May-2017 21:50
Manganese	391		4.62	mg/Kg	10	30-May-2017 21:50
Molybdenum	< 4.62		4.62	mg/Kg	10	30-May-2017 21:50
Nickel	17.7		4.62	mg/Kg	10	30-May-2017 21:50
Potassium	< 462		462	mg/Kg	10	30-May-2017 21:50
Selenium	< 4.62		4.62	mg/Kg	10	30-May-2017 21:50
Silver	< 4.62		4.62	mg/Kg	10	30-May-2017 21:50
Sodium	< 462		462	mg/Kg	10	30-May-2017 21:50
Strontium	30.0		4.62	mg/Kg	10	30-May-2017 21:50
Thallium	< 4.62		4.62	mg/Kg	10	30-May-2017 21:50
Tin	8.38		4.62	mg/Kg	10	30-May-2017 21:50
Titanium	285		4.62	mg/Kg	10	30-May-2017 21:50
Vanadium	107		4.62	mg/Kg	10	30-May-2017 21:50
Zinc	17.4		4.62	mg/Kg	10	30-May-2017 21:50
MERCURY BY SW7471B		Method:SW7471A		Prep:SW7471A / 30-May-2017		Analyst: JC
Mercury	< 0.00349		0.00349	mg/Kg	1	30-May-2017 16:54

Note: See Qualifiers Page for a list of qualifiers and their explanation.

WEIGHT LOG

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 WorkOrder: HS17051351

Batch ID: 116660 Method: MERCURY BY SW7471B Prep: HG_S_LOWPR

SampleID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS17051351-04	1	0.5623	40 (mL)	71.14
HS17051351-05	1	0.5553	40 (mL)	72.03
HS17051351-06	1	0.5753	40 (mL)	69.53
HS17051351-09	1	0.5538	40 (mL)	72.23
HS17051351-10	1	0.5721	40 (mL)	69.92

Batch ID: 116664 Method: METALS BY SW6020A Prep: 3050_I_LOW

SampleID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS17051351-01	1	2.6584	50 (mL)	18.81
HS17051351-02	1	0.9004	50 (mL)	55.53
HS17051351-03	1	0.5301	50 (mL)	94.32
HS17051351-04	1	0.5239	50 (mL)	95.44
HS17051351-05	1	0.5451	50 (mL)	91.73
HS17051351-06	1	0.5254	50 (mL)	95.17
HS17051351-07	1	0.6949	50 (mL)	71.95
HS17051351-08	1	0.7999	50 (mL)	62.51
HS17051351-09	1	0.5435	50 (mL)	92
HS17051351-10	1	0.5413	50 (mL)	92.37

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 WorkOrder: HS17051351

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID 116660		Test Name : MERCURY BY SW7471B		Matrix: Solid		
HS17051351-04	-04-HBI Fines	24 May 2017 11:20		30 May 2017 11:09	30 May 2017 16:45	1
HS17051351-05	-05-Remet & HBI Fines	24 May 2017 11:30		30 May 2017 11:09	30 May 2017 16:49	1
HS17051351-06	-06-Iron Oxide Fines	24 May 2017 11:35		30 May 2017 11:09	30 May 2017 16:51	1
HS17051351-09	-09-HBI Fines Cold Briquettes	24 May 2017 11:55		30 May 2017 11:09	30 May 2017 16:52	1
HS17051351-10	-010-HBI Fines	24 May 2017 12:00		30 May 2017 11:09	30 May 2017 16:54	1
Batch ID 116664		Test Name : METALS BY SW6020A		Matrix: Solid		
HS17051351-01	-01-Remet Pile	24 May 2017 10:50		30 May 2017 11:38	31 May 2017 18:17	50
HS17051351-01	-01-Remet Pile	24 May 2017 10:50		30 May 2017 11:38	31 May 2017 15:16	500
HS17051351-01	-01-Remet Pile	24 May 2017 10:50		30 May 2017 11:38	30 May 2017 21:08	50
HS17051351-02	-02-HBI Chips & Fines	24 May 2017 10:55		30 May 2017 11:38	31 May 2017 18:22	50
HS17051351-02	-02-HBI Chips & Fines	24 May 2017 10:55		30 May 2017 11:38	31 May 2017 15:20	500
HS17051351-02	-02-HBI Chips & Fines	24 May 2017 10:55		30 May 2017 11:38	30 May 2017 21:13	50
HS17051351-03	-03-Remet/Fines/Iron Oxide Pellets	24 May 2017 11:05		30 May 2017 11:38	31 May 2017 18:35	10
HS17051351-03	-03-Remet/Fines/Iron Oxide Pellets	24 May 2017 11:05		30 May 2017 11:38	31 May 2017 15:34	100
HS17051351-03	-03-Remet/Fines/Iron Oxide Pellets	24 May 2017 11:05		30 May 2017 11:38	30 May 2017 21:17	10
HS17051351-04	-04-HBI Fines	24 May 2017 11:20		30 May 2017 11:38	31 May 2017 18:40	10
HS17051351-04	-04-HBI Fines	24 May 2017 11:20		30 May 2017 11:38	31 May 2017 15:38	100
HS17051351-04	-04-HBI Fines	24 May 2017 11:20		30 May 2017 11:38	30 May 2017 21:22	10
HS17051351-05	-05-Remet & HBI Fines	24 May 2017 11:30		30 May 2017 11:38	31 May 2017 18:44	5
HS17051351-05	-05-Remet & HBI Fines	24 May 2017 11:30		30 May 2017 11:38	31 May 2017 15:43	100
HS17051351-06	-06-Iron Oxide Fines	24 May 2017 11:35		30 May 2017 11:38	31 May 2017 18:49	5
HS17051351-06	-06-Iron Oxide Fines	24 May 2017 11:35		30 May 2017 11:38	31 May 2017 15:48	100
HS17051351-07	-07-Coated Iron Oxide Pellets	24 May 2017 11:45		30 May 2017 11:38	31 May 2017 18:53	1
HS17051351-07	-07-Coated Iron Oxide Pellets	24 May 2017 11:45		30 May 2017 11:38	31 May 2017 15:52	10
HS17051351-08	-08-Iron Oxide Pellets	24 May 2017 11:50		30 May 2017 11:38	31 May 2017 18:58	1
HS17051351-08	-08-Iron Oxide Pellets	24 May 2017 11:50		30 May 2017 11:38	31 May 2017 15:57	10
HS17051351-09	-09-HBI Fines Cold Briquettes	24 May 2017 11:55		30 May 2017 11:38	31 May 2017 19:02	10
HS17051351-09	-09-HBI Fines Cold Briquettes	24 May 2017 11:55		30 May 2017 11:38	31 May 2017 16:01	100
HS17051351-09	-09-HBI Fines Cold Briquettes	24 May 2017 11:55		30 May 2017 11:38	30 May 2017 21:45	10
HS17051351-10	-010-HBI Fines	24 May 2017 12:00		30 May 2017 11:38	31 May 2017 19:07	10
HS17051351-10	-010-HBI Fines	24 May 2017 12:00		30 May 2017 11:38	31 May 2017 16:06	100
HS17051351-10	-010-HBI Fines	24 May 2017 12:00		30 May 2017 11:38	30 May 2017 21:50	10

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 WorkOrder: HS17051351

QC BATCH REPORT

Batch ID: 116660 Instrument: HG03 Method: SW7471A

MBLK	Sample ID: MBLK-116660	Units: ug/Kg		Analysis Date: 30-May-2017 16:27				
Client ID:	Run ID: HG03_295498	SeqNo: 4104740		PrepDate: 30-May-2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD Limit Qual

Mercury < 3.39 3.39

LCS	Sample ID: LCS-116660	Units: ug/Kg		Analysis Date: 30-May-2017 16:29				
Client ID:	Run ID: HG03_295498	SeqNo: 4104741		PrepDate: 30-May-2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD Limit Qual

Mercury 353.4 3.42 342.4 0 103 85 - 115

MS	Sample ID: HS17051359-07MS	Units: ug/Kg		Analysis Date: 30-May-2017 17:04				
Client ID:	Run ID: HG03_295498	SeqNo: 4104757		PrepDate: 30-May-2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD Limit Qual

Mercury 386.2 3.46 347.3 15.27 107 85 - 115

MSD	Sample ID: HS17051359-07MSD	Units: ug/Kg		Analysis Date: 30-May-2017 17:05				
Client ID:	Run ID: HG03_295498	SeqNo: 4104758		PrepDate: 30-May-2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD Limit Qual

Mercury 370.5 3.47 348.2 15.27 102 85 - 115 386.2 4.17 20

The following samples were analyzed in this batch: HS17051351-04 HS17051351-05 HS17051351-06 HS17051351-09
 HS17051351-10

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 WorkOrder: HS17051351

QC BATCH REPORT

Batch ID: 116664 Instrument: ICPMS04 Method: SW6020

MBLK	Sample ID: MBLK-116664	Units: mg/Kg			Analysis Date: 31-May-2017 14:53					
Client ID:		Run ID: ICPMS04_295528	SeqNo: 4106215	PrepDate: 30-May-2017	DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Aluminum	< 1.00	1.00								
Antimony	< 0.500	0.500								

MBLK	Sample ID: MBLK-116664	Units: mg/Kg			Analysis Date: 30-May-2017 19:39					
Client ID:		Run ID: ICPMS04_295462	SeqNo: 4104976	PrepDate: 30-May-2017	DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Arsenic	< 0.500	0.500								
Barium	< 0.500	0.500								
Beryllium	< 0.500	0.500								
Cadmium	< 0.500	0.500								
Calcium	< 50.0	50.0								
Chromium	< 0.500	0.500								
Cobalt	< 0.500	0.500								
Copper	< 0.200	0.200								
Iron	< 50.0	50.0								
Lead	< 0.500	0.500								
Magnesium	< 50.0	50.0								
Manganese	< 0.500	0.500								
Molybdenum	< 0.500	0.500								
Nickel	< 0.500	0.500								
Potassium	< 50.0	50.0								
Selenium	< 0.500	0.500								
Silver	< 0.500	0.500								
Sodium	< 50.0	50.0								
Strontium	< 0.500	0.500								
Thallium	< 0.500	0.500								
Tin	< 0.500	0.500								
Titanium	< 0.500	0.500								
Vanadium	< 0.500	0.500								
Zinc	< 0.500	0.500								

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 WorkOrder: HS17051351

QC BATCH REPORT

Batch ID: 116664 Instrument: ICPMS04 Method: SW6020

LCS		Sample ID: LCS-116664	Units: mg/Kg			Analysis Date: 31-May-2017 14:58			
Client ID:		Run ID: ICPMS04_295528	SeqNo: 4106216		PrepDate: 30-May-2017	DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Aluminum	53.93	1.00	60	0	89.9	80 - 120			
Antimony	9.952	0.500	10	0	99.5	80 - 120			

LCS		Sample ID: LCS-116664	Units: mg/Kg			Analysis Date: 30-May-2017 19:44			
Client ID:		Run ID: ICPMS04_295462	SeqNo: 4104977		PrepDate: 30-May-2017	DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Arsenic	9.531	0.500	10	0	95.3	80 - 120			
Barium	9.741	0.500	10	0	97.4	80 - 120			
Beryllium	9.844	0.500	10	0	98.4	80 - 120			
Cadmium	9.65	0.500	10	0	96.5	80 - 120			
Calcium	977.6	50.0	1000	0	97.8	80 - 120			
Chromium	9.602	0.500	10	0	96.0	80 - 120			
Cobalt	9.603	0.500	10	0	96.0	80 - 120			
Copper	9.712	0.200	10	0	97.1	80 - 120			
Iron	962.1	50.0	1000	0	96.2	80 - 120			
Lead	9.619	0.500	10	0	96.2	80 - 120			
Magnesium	977.4	50.0	1000	0	97.7	80 - 120			
Manganese	9.506	0.500	10	0	95.1	80 - 120			
Molybdenum	9.998	0.500	10	0	100.0	80 - 120			
Nickel	9.635	0.500	10	0	96.4	80 - 120			
Potassium	996.3	50.0	1000	0	99.6	80 - 120			
Selenium	9.878	0.500	10	0	98.8	80 - 120			
Silver	9.697	0.500	10	0	97.0	80 - 120			
Sodium	1008	50.0	1000	0	101	80 - 120			
Strontium	10.06	0.500	10	0	101	80 - 120			
Thallium	9.433	0.500	10	0	94.3	80 - 120			
Tin	9.922	0.500	10	0	99.2	80 - 120			
Titanium	19.87	0.500	20	0	99.3	80 - 120			
Vanadium	9.656	0.500	10	0	96.6	80 - 120			
Zinc	9.594	0.500	10	0	95.9	80 - 120			

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 WorkOrder: HS17051351

QC BATCH REPORT

Batch ID: 116664 Instrument: ICPMS04 Method: SW6020

MS	Sample ID: HS17051306-07MS	Units: mg/Kg			Analysis Date: 30-May-2017 19:57					
Client ID:	Run ID: ICPMS04_295462	SeqNo: 4104980	PrepDate: 30-May-2017	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	11770	0.918	9.183	9284	27100	75 - 125				SEO
Arsenic	10.84	0.459	9.183	2.523	90.5	75 - 125				
Barium	77.17	0.459	9.183	68.16	98.1	75 - 125				O
Beryllium	10.34	0.459	9.183	0.5638	106	75 - 125				
Cadmium	8.575	0.459	9.183	0.1071	92.2	75 - 125				
Calcium	43820	45.9	918.3	43280	58.3	75 - 125				SEO
Chromium	21.23	0.459	9.183	10.82	113	75 - 125				
Cobalt	12.58	0.459	9.183	4.194	91.4	75 - 125				
Copper	14.68	0.184	9.183	6.546	88.6	75 - 125				
Iron	11540	45.9	918.3	9844	184	75 - 125				SO
Lead	13.93	0.459	9.183	5.609	90.7	75 - 125				
Magnesium	4579	45.9	918.3	3483	119	75 - 125				
Manganese	254.8	0.459	9.183	243.4	124	75 - 125				EO
Molybdenum	9.025	0.459	9.183	0.287	95.2	75 - 125				
Nickel	17.56	0.459	9.183	8.853	94.8	75 - 125				
Potassium	3384	45.9	918.3	1963	155	75 - 125				S
Selenium	8.889	0.459	9.183	0.9444	86.5	75 - 125				
Silver	8.478	0.459	9.183	0.03564	91.9	75 - 125				
Sodium	924.3	45.9	918.3	40.19	96.3	75 - 125				
Strontium	44.69	0.459	9.183	35.81	96.7	75 - 125				
Thallium	8.364	0.459	9.183	0.1411	89.5	75 - 125				
Tin	8.996	0.459	9.183	0.6286	91.1	75 - 125				
Titanium	222.2	0.459	18.37	150.1	393	75 - 125				SEO
Vanadium	29.66	0.459	9.183	18.57	121	75 - 125				
Zinc	33.23	0.459	9.183	22.45	117	75 - 125				

MS	Sample ID: HS17051306-07MS	Units: mg/Kg			Analysis Date: 31-May-2017 18:04					
Client ID:	Run ID: ICPMS04_295528	SeqNo: 4107310	PrepDate: 30-May-2017	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	5.445	0.459	9.183	0.1033	58.2	75 - 125				S

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 WorkOrder: HS17051351

QC BATCH REPORT

Batch ID: 116664 Instrument: ICPMS04 Method: SW6020

MSD		Sample ID: HS17051306-07MSD			Units: mg/Kg		Analysis Date: 30-May-2017 20:01			
Client ID:		Run ID: ICPMS04_295462			SeqNo: 4104981		PrepDate: 30-May-2017		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	12280	0.924	9.235	9284	32500	75 - 125	11770	4.26	20	SEO
Arsenic	11.19	0.462	9.235	2.523	93.9	75 - 125	10.84	3.23	20	
Barium	80.34	0.462	9.235	68.16	132	75 - 125	77.17	4.03	20	SO
Beryllium	10.64	0.462	9.235	0.5638	109	75 - 125	10.34	2.85	20	
Cadmium	8.839	0.462	9.235	0.1071	94.6	75 - 125	8.575	3.03	20	
Calcium	44450	46.2	923.5	43280	126	75 - 125	43820	1.43	20	SEO
Chromium	21.63	0.462	9.235	10.82	117	75 - 125	21.23	1.88	20	
Cobalt	12.85	0.462	9.235	4.194	93.7	75 - 125	12.58	2.07	20	
Copper	15.29	0.185	9.235	6.546	94.7	75 - 125	14.68	4.07	20	
Iron	11960	46.2	923.5	9844	229	75 - 125	11540	3.59	20	SO
Lead	14.42	0.462	9.235	5.609	95.4	75 - 125	13.93	3.4	20	
Magnesium	4636	46.2	923.5	3483	125	75 - 125	4579	1.24	20	
Manganese	261.1	0.462	9.235	243.4	191	75 - 125	254.8	2.43	20	SEO
Molybdenum	9.375	0.462	9.235	0.287	98.4	75 - 125	9.025	3.8	20	
Nickel	17.92	0.462	9.235	8.853	98.1	75 - 125	17.56	2.01	20	
Potassium	3469	46.2	923.5	1963	163	75 - 125	3384	2.48	20	S
Selenium	9.409	0.462	9.235	0.9444	91.7	75 - 125	8.889	5.69	20	
Silver	8.732	0.462	9.235	0.03564	94.2	75 - 125	8.478	2.95	20	
Sodium	948.2	46.2	923.5	40.19	98.3	75 - 125	924.3	2.55	20	
Strontium	45.73	0.462	9.235	35.81	107	75 - 125	44.69	2.29	20	
Thallium	8.721	0.462	9.235	0.1411	92.9	75 - 125	8.364	4.18	20	
Tin	9.236	0.462	9.235	0.6286	93.2	75 - 125	8.996	2.63	20	
Titanium	232.6	0.462	18.47	150.1	447	75 - 125	222.2	4.59	20	SEO
Vanadium	30.76	0.462	9.235	18.57	132	75 - 125	29.66	3.65	20	S
Zinc	33.8	0.462	9.235	22.45	123	75 - 125	33.23	1.73	20	

MSD		Sample ID: HS17051306-07MSD			Units: mg/Kg		Analysis Date: 31-May-2017 18:08			
Client ID:		Run ID: ICPMS04_295528			SeqNo: 4107311		PrepDate: 30-May-2017		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	5.677	0.462	9.235	0.1033	60.3	75 - 125	5.445	4.17	20	S

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 WorkOrder: HS17051351

QC BATCH REPORT

Batch ID: 116664 Instrument: ICPMS04 Method: SW6020

PDS		Sample ID: HS17051306-07PDS			Units: mg/Kg		Analysis Date: 31-May-2017 15:11		
Client ID:		Run ID: ICPMS04_295528			SeqNo: 4106242		PrepDate: 30-May-2017		DF: 100
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Aluminum	9994	91.4	913.9	8020	216	75 - 125			SO
Calcium	127700	4570	91390	37800	98.3	75 - 125			
Manganese	1128	45.7	913.9	217.4	99.7	75 - 125			

PDS		Sample ID: HS17051306-07PDS			Units: mg/Kg		Analysis Date: 31-May-2017 18:13		
Client ID:		Run ID: ICPMS04_295528			SeqNo: 4107312		PrepDate: 30-May-2017		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Antimony	8.698	0.457	9.139	0.1033	94.0	75 - 125			
Magnesium	4064	45.7	913.9	3175	97.3	75 - 125			
Strontium	42.47	0.457	9.139	32.64	108	75 - 125			

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 WorkOrder: HS17051351

QC BATCH REPORT

Batch ID: 116664 Instrument: ICPMS04 Method: SW6020

PDS		Sample ID: HS17051306-07PDS			Units: mg/Kg		Analysis Date: 30-May-2017 20:06		
Client ID:		Run ID: ICPMS04_295462		SeqNo: 4104982		PrepDate: 30-May-2017		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	10.76	0.457	9.139	2.523	90.1	75 - 125			
Barium	72.69	0.457	9.139	68.16	49.6	75 - 125			SO
Beryllium	8.952	0.457	9.139	0.5638	91.8	75 - 125			
Cadmium	8.334	0.457	9.139	0.1071	90.0	75 - 125			
Chromium	18.66	0.457	9.139	10.82	85.8	75 - 125			
Cobalt	12.13	0.457	9.139	4.194	86.9	75 - 125			
Copper	14.14	0.183	9.139	6.546	83.1	75 - 125			
Iron	10490	45.7	913.9	9844	70.6	75 - 125			SO
Lead	13.64	0.457	9.139	5.609	87.9	75 - 125			
Molybdenum	9.139	0.457	9.139	0.287	96.9	75 - 125			
Nickel	16.51	0.457	9.139	8.853	83.8	75 - 125			
Potassium	2736	45.7	913.9	1963	84.6	75 - 125			
Selenium	9.496	0.457	9.139	0.9444	93.6	75 - 125			
Silver	8.362	0.457	9.139	0.03564	91.1	75 - 125			
Sodium	891.7	45.7	913.9	40.19	93.2	75 - 125			
Thallium	8.268	0.457	9.139	0.1411	88.9	75 - 125			
Tin	9.013	0.457	9.139	0.6286	91.7	75 - 125			
Titanium	160	0.457	18.28	150.1	54.6	75 - 125			SO
Vanadium	26.61	0.457	9.139	18.57	88.0	75 - 125			
Zinc	29.92	0.457	9.139	22.45	81.7	75 - 125			

SD		Sample ID: HS17051306-07SD			Units: mg/Kg		Analysis Date: 31-May-2017 15:07		
Client ID:		Run ID: ICPMS04_295528		SeqNo: 4106218		PrepDate: 30-May-2017		DF: 500	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit Qual
Aluminum	7779	457					8020	3	10
Calcium	36720	22800					37800	2.87	10
Manganese	205.3	228					217.4	0	10 J

SD		Sample ID: HS17051306-07SD			Units: mg/Kg		Analysis Date: 31-May-2017 17:59		
Client ID:		Run ID: ICPMS04_295528		SeqNo: 4107309		PrepDate: 30-May-2017		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit Qual
Antimony	< 2.28	2.28					0.1033	0	10

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 WorkOrder: HS17051351

QC BATCH REPORT

Batch ID: 116664 Instrument: ICPMS04 Method: SW6020

SD	Sample ID: HS17051306-07SD	Units: mg/Kg	Analysis Date: 30-May-2017 19:52						
Client ID:	Run ID: ICPMS04_295462	SeqNo: 4104979	PrepDate: 30-May-2017 DF: 5						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	Limit Qual
Arsenic	2.621	2.28					2.523	3.91	10
Barium	65.44	2.28					68.16	4	10
Beryllium	0.5605	2.28					0.5638	0	10 J
Cadmium	< 2.28	2.28					0.1071	0	10
Chromium	11.25	2.28					10.82	4	10
Cobalt	4.385	2.28					4.194	4.56	10
Copper	6.835	0.914					6.546	4.42	10
Iron	10410	228					9844	5.76	10
Lead	5.693	2.28					5.609	1.51	10
Magnesium	3530	228					3483	1.34	10
Molybdenum	< 2.28	2.28					0.287	0	10
Nickel	9.275	2.28					8.853	4.76	10
Potassium	1974	228					1963	0.564	10
Selenium	< 2.28	2.28					0.9444	0	10
Silver	< 2.28	2.28					0.03564	0	10
Sodium	< 228	228					40.19	0	10
Strontium	37.13	2.28					35.81	3.69	10
Thallium	< 2.28	2.28					0.1411	0	10
Tin	0.6154	2.28					0.6286	0	10 J
Titanium	148.3	2.28					150.1	1.16	10
Vanadium	19.2	2.28					18.57	3.37	10
Zinc	24.14	2.28					22.45	7.52	10

The following samples were analyzed in this batch:

HS17051351-01	HS17051351-02	HS17051351-03	HS17051351-04
HS17051351-05	HS17051351-06	HS17051351-07	HS17051351-08
HS17051351-09	HS17051351-10		

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Texas Commission on Environmental Quality
 Project: TCEQ Region 14 COC 51689
 WorkOrder: HS17051351

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

<u>Acronym</u>	<u>Description</u>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<u>Unit Reported</u>	<u>Description</u>
mg/Kg-dry	Milligrams per Kilogram- Dry weight corrected

CERTIFICATIONS, ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	17-027-0	27-Mar-2018
California	2919 2016-2018	31-Jul-2018
Illinois	004112	09-May-2018
Kansas	E-10352 2016-2017	31-Jul-2017
Kentucky	123043	30-Apr-2018
Louisiana	03087 2017-2017	30-Jun-2018
North Carolina	624-2017	31-Dec-2017
Oklahoma	2016-122	31-Aug-2017
Texas	T104704231-17-18	30-Apr-2018

Sample Receipt Checklist

Client Name: TCEQ Corpus Christi
Work Order: HS17051351

Date/Time Received: 25-May-2017 08:30
Received by: NDR

Checklist completed by: Cesar A. Lira
eSignature Date: 25-May-2017

Reviewed by: Dane J. Wacasey
eSignature Date: 29-May-2017

Matrices: Solid

Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
TX1005 solids received in hermetically sealed vials?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	4.0c/3.7c uc/c		IR11
Cooler(s)/Kit(s):	Lg. Blue		
Date/Time sample(s) sent to storage:	5/25/2017 1955		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<input type="text"/>		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:



Chain of Custody Record

51689

Location: **Voestalpine**

Region: **TCEQ R14 Corpus Christi** Organization #: **PCA Code:** **Program:**

Permit #: **361-825-3100** Sampler telephone number: **361-825-3100**

E-Mail ID: **Kendra Bernhagen** Sampler: (please print clearly) **Kendra Bernhagen**

Lab ID Number	Sample ID	Date	Time	# of Bottles	Grab/Comp.	Matrix L,S,M,O,T	CL2	pH	Cond.	Analyses Requested	REMARKS
-01	remet - FINE	5/24/17	1050	1	G	S					
-02	HBI CHIPS	5/24/17	1055	1	G	S					
-03	remet FINE iron chips 82 FINE	5/24/17	1105	1	G	S				TOTAL METALS TCLP	should TCLP pending TOTAL RESULTS
-04	HBI FINE	5/24/17	1170	1	G	S				1% MERCURY	
-05	remet & HBI FINE	5/24/17	1130	1	G	S				1% MERCURY	
-06	iron chip remet FINE	5/24/17	1135	1	G	S				1% MERCURY	
-07	remet FINE CEC-FUNCTION	5/24/17	1145	1	G	S					
-08	iron chip remet FINE	5/24/17	1150	1	G	S					
-09	HBI FINE remet FINE	5/24/17	1155	1	G	S				1% MERCURY	
-10	HBI FINE	5/24/17	1200	1	G	S				1% MERCURY	

Texas Commission on Environmental Quality
TCEQ Region 14 COC 51689



Relinquished by: **Kendra Bernhagen** Date: **5/24/17** Time: **1554** Received by: **[Signature]**

Relinquished by: **[Signature]** Date: **5/24/17** Time: **1600** Received by: **MR. [Signature]** Date: **5/25/17** Time: **0830**

For Laboratory Use:

Received on ice: N deg. C

Preservatives: Y N L. Blue

COC Seal: X N 410

Seals Intact: X N 40#11 CFC-0.3

Shipper name: _____ Shipper Number: _____

TCEQ-10065 (11/02) White (Original) - Lab Yellow-1 Lab Page 27 of 28 Pink-Contract Lab Manual

 ALS Environmental 3352 128th Avenue Holland-Michigan-49424 Tel. +1 616 399 6070 Fax. +1 616 399 6185		CUSTODY SEAL Date: 05/25/17 Time: 15:20 Name: KAROLINA STROVANSKI Comp. No: 1123 R14-KIPPUS UNIT 11		Sent Backen By: (SM)
lg Bmw		MAY 25 2017		Date: 05/25/17

24MAY17 04:18P 44 DELIVERY 44
 IDNM: C01E032 PCSI: 1
 8855 CORPUS CHRISTI, TX
 SENDER: SPS GROUP USA CORP
 ALS
 Phone: 281-530-5556
 Delivery
 RECV: ALS
 10450 STAN CLIFF
 SUITE 210
 HOUSTON, TX 77099
 000-000-0000
 GRX ACCT:

GMI 3062750210
 08:30
 Signature: NR
 Print name: NR
 DATE: 05175117
 24MAY17 04:18P
 AGENCY: 8855



ATTACHMENT 13
May 24, 2017 Heavy Metal Sampling Photographs

Total Pages: 11

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

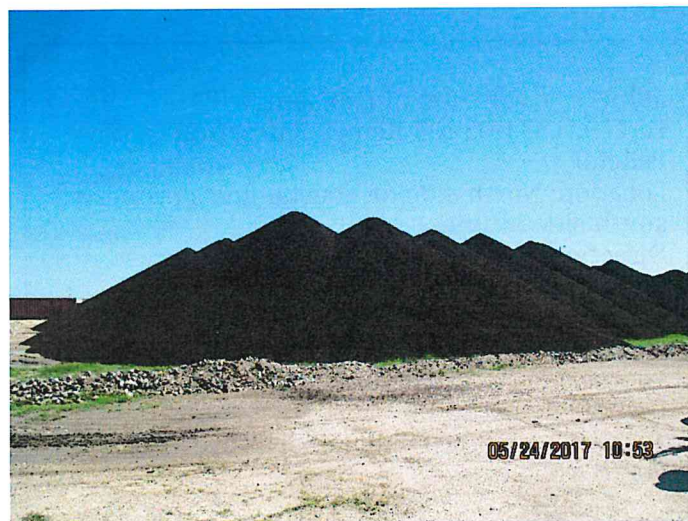
May 16, 2017 - September 8, 2017



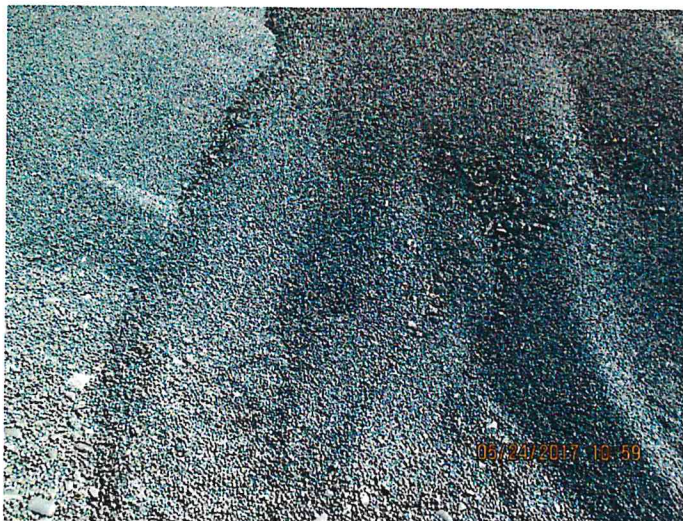
Subject: Collection of Lab Sample ID
HS17051351-01 (01-Remet Pile)
Location: North side of Voestalpine's property;
northwest side of pile
Direction: Facing northeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 1



Subject: Location of Lab Sample ID
HS17051351-01 (01-Remet Pile)
Location: North side of Voestalpine's property;
northwest side of pile
Direction: Facing northeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 2



Subject: 01-Remet Pile
Location: North side of Voestalpine's property
Direction: Facing northeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 3



Subject: Location of Lab Sample ID
HS17051351-02 (02-HBI Chips & Fines)
Location: North side of Voestalpine's property;
northwest side of pile
Direction: Facing northeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 4



Subject: 02-HBI Chips & Fines
Location: North side of Voestalpine's property
Direction: Facing northeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 5



Subject: Collection of Lab Sample ID
HS17051351-03 (03-Remet/Fines/Iron Oxide
Pellets)
Location: North side of Voestalpine's property;
south side of pile
Direction: Facing northeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 6



Subject: Location of Lab Sample ID
HS17051351-03 (03-Remet/Fines/Iron Oxide
Pellets)
Location: North side of Voestalpine's property;
south side of pile
Direction: Facing northeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 7



Subject: 03-Remet/Fines/Iron Oxide Pellets
Location: North side of Voestalpine's property
Direction: Facing northeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 8



Subject: Collection of Lab Sample ID
HS17051351-04 (04-HBI Fines)
Location: North side of Voestalpine's property;
south side of pile
Direction: Facing northeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 9



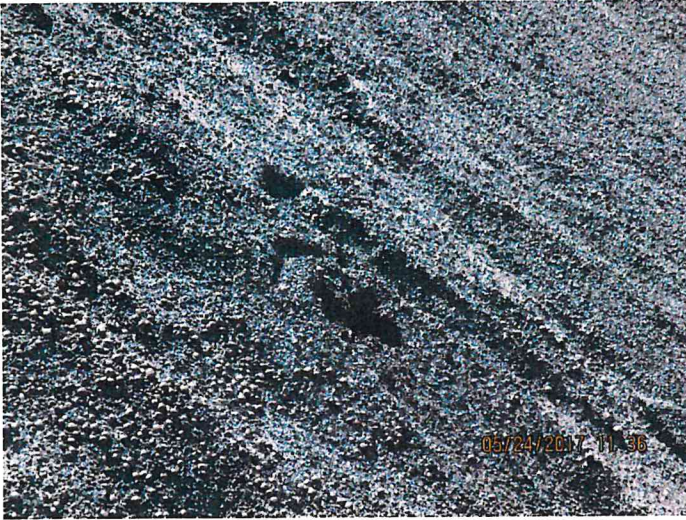
Subject: Location of Lab Sample ID
HS17051351-04 (04-HBI Fines)
Location: North side of Voestalpine's property;
south side of pile
Direction: Facing northeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 10



Subject: 04-HBI Fines
Location: North side of Voestalpine's property
Direction: Facing northeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 11



Subject: Collection of Lab Sample ID
HS17051351-05 (05-Remet & HBI Fines)
Location: South side of Voestalpine's property;
north side of pile
Direction: Facing southeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 12



Subject: Location of Lab Sample ID
HS17051351-05 (05-Remet & HBI Fines)
Location: South side of Voestalpine's property;
north side of pile
Direction: Facing southeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 13



Subject: 05-Remet & HBI Fines
Location: North side of Voestalpine's property
Direction: Facing southeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 14



Subject: Collection of Lab Sample ID
HS17051351-06 (06-Iron Oxide Fines)
Location: South side of Voestalpine's property;
northeast side of pile
Direction: Facing southwest
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 15



Subject: Location of Lab Sample ID
HS17051351-06 (06-Iron Oxide Fines)
Location: South side of Voestalpine's property;
northeast side of pile
Direction: Facing southwest
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 16



Subject: 06-Iron Oxide Fines
Location: South side of Voestalpine's property
Direction: Facing southwest
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 17



Subject: Collection of Lab Sample ID
HS17051351-07 (07-Coated Iron Oxide Pellets)
Location: South side of Voestalpine's property;
northwest side of pile
Direction: Facing northeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 18



Subject: Location of Lab Sample ID
HS17051351-07 (07-Coated Iron Oxide Pellets)
Location: South side of Voestalpine's property;
northwest side of pile
Direction: Facing northeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 19



Subject: 07-Coated Iron Oxide Pellets
Location: South side of Voestalpine's property
Direction: Facing southeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 20



Subject: Location of Lab Sample ID
HS17051351-08 (08-Iron Oxide Pellets)
Location: South side of Voestalpine's property;
northwest side of pile
Direction: Facing northeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 21



Subject: 08-Iron Oxide Pellets
Location: South side of Voestalpine's property
Direction: Facing northeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 22



Subject: Collection of Lab Sample ID
HS17051351-09 (09-HBI Fines Cold Briquettes)
Location: South side of Voestalpine's property;
northwest side of pile
Direction: Facing southeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 23



Subject: Location of Lab Sample ID
HS17051351-09 (09-HBI Fines Cold Briquettes)
Location: South side of Voestalpine's property;
northwest side of pile
Direction: Facing southeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 24



Subject: 09-HBI Fines Cold Briquettes
Location: South side of Voestalpine's property
Direction: Facing southeast
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 25



Subject: Collection of Lab Sample ID
HS17051351-10 (10-HBI Fines)
Location: South side of Voestalpine's property;
southeast side of pile
Direction: Facing southwest
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 26



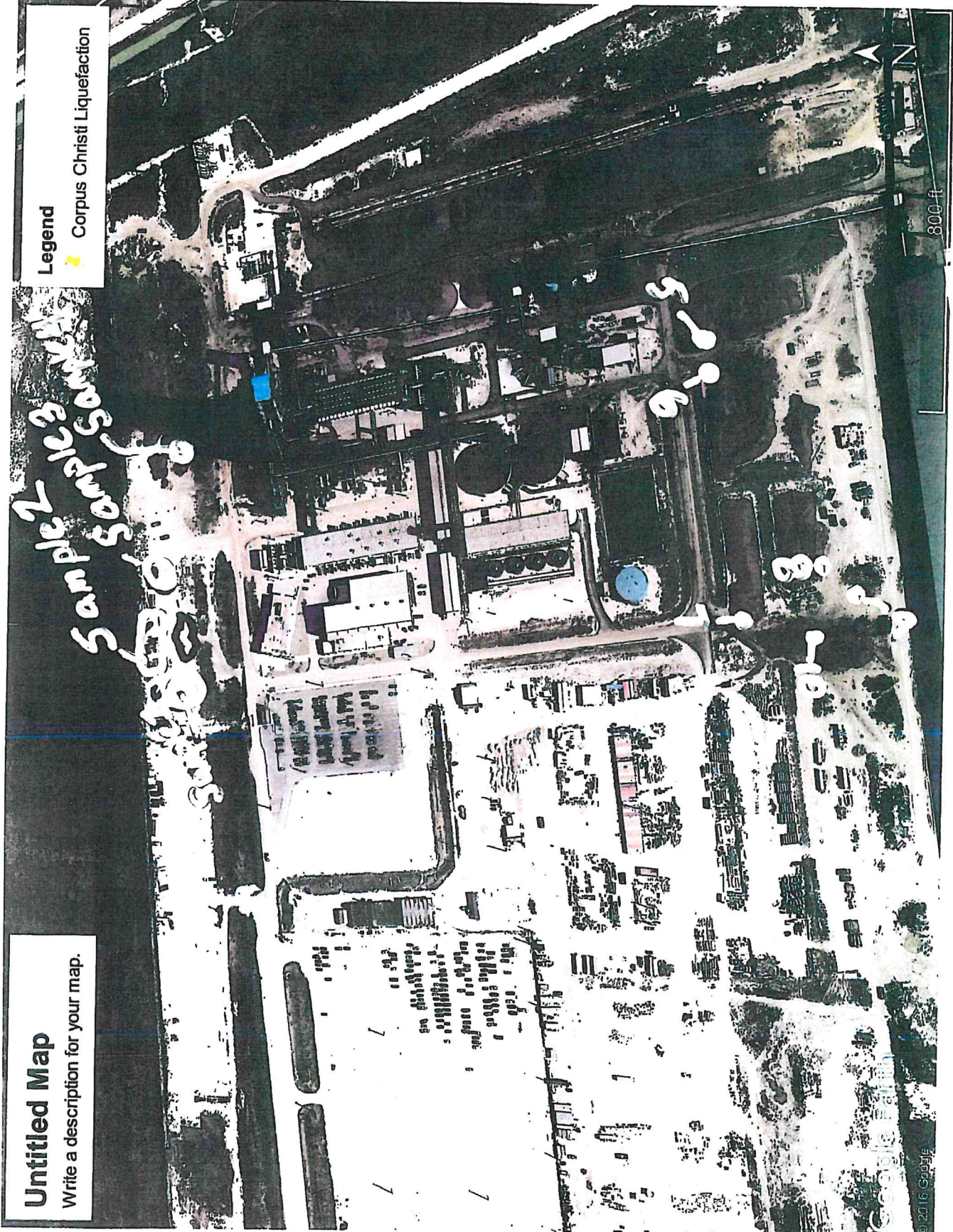
Subject: Location of Lab Sample ID
HS17051351-10 (10-HBI Fines)
Location: South side of Voestalpine's property;
southeast side of pile
Direction: Facing southwest
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 27



Subject: 10-HBI Fines
Location: South side of Voestalpine's property
Direction: Facing southwest
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 28



Subject: 10-HBI Fines
Location: South side of Voestalpine's property
Direction: Facing northwest
City: Portland
County: San Patricio
Date: May 24, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 29

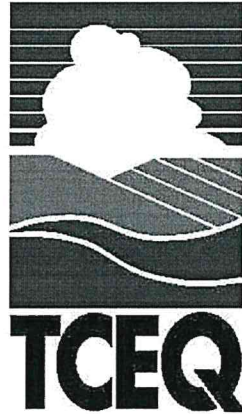


Untitled Map
Write a description for your map.

Legend
★ Corpus Christi Liquefaction

800 ft

© 2016 Google



ATTACHMENT 14
Laboratory Analysis Request No. 1706003

Total Pages: 4

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 - September 8, 2017

Texas Commission on Environmental Quality

Laboratory and Quality Assurance Section
P.O. Box 13087, MC-165
Austin, Texas 78711-3087
(512) 239-1716

Laboratory Analysis Results

Request Number: 1706003

Request Lead: Frank Martinez

Region: T14

Date Received: 6/5/2017

Facility(ies) Sampled	City	County	Facility Type
La Quinta Plant Voestalpine	Portland	San Patricio	Manufacturing

Sample(s) Received

Field ID Number: 20170525-01 Laboratory Sample Number: 1706003-001 Sampled by: Thomas Haney
Sampling Site: Complainant's Property Date & Time Sampled: 05/25/17 11:33:00 Valid Sample: Yes
Comments: Tape lift from siding on front outer wall (painted dark yellow) located on SE side of residence. ^{at}
~~an East facing window sill.~~

Field ID Number: 20170525-02 Laboratory Sample Number: 1706003-002 Sampled by: Thomas Haney
Sampling Site: Complainant's Property Date & Time Sampled: 05/25/17 11:37:00 Valid Sample: Yes
Comments: Tape lift from an outside window glass located on the SE (front) side of the residence. ^{at}
~~Southeast facing window sill.~~

Requested Laboratory Procedure(s):

Analysis: AP007MIC

Environmental Sample Characterization using Polarized Light Microscopy

Analysis: AP008MIC

Sample Characterization using Scanning Electron Microscope with an Energy Dispersive X-Ray Microanalysis Spectrometer


Please note that this analytical technique is not capable of measuring all compounds which might have adverse health effects. For questions on the analytical procedures please contact the laboratory manager at (512) 239-1716. For an update on the health effects evaluation of these data, please contact the Toxicology Division at (512) 239-1795.

Analyst:


Jeffrey Klettman

Date: 6/9/17

Laboratory Manager:


Frank Martinez

Date: 6/12/17

Laboratory Analysis Results

Request Number: 1706003

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1706003-001

Analysis began: 6/8/2017

Analyst: Jeffrey Kettelman

SOP: AP007MIC Analysis completed: 6/9/2017

Sample 20170525-01 was lightly loaded. Metal particles accounted for less than 5% of the particle coverage. There were only three metal particles. Metal particles ranged in color from black to reddish and ranged in size from 30-50 μm . The sample contained between 71 and 80% plant material and between 5 and 20% common clays and minerals. Other particles present in quantities less than 5% included fungal spores, paint chips, and plant fibers.

Sample Number: 1706003-001

Analysis began: 6/8/2017

Analyst: Jeffrey Kettelman

SOP: AP008MIC Analysis completed: 6/9/2017

Energy dispersive spectroscopy (EDS) analysis of a metal particle showed elements carbon, oxygen, silicon, and iron. The primary peaks in the x-ray spectrum were carbon, oxygen, and iron.

This x-ray spectrum of a metal particle is consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as salt and feldspar.

Sample Number: 1706003-002

Analysis began: 6/8/2017

Analyst: Jeffrey Kettelman

SOP: AP007MIC Analysis completed: 6/9/2017

Sample 20170525-02 was lightly loaded. Metal particles accounted for between 21 and 30% of the particle coverage. Metal particles ranged in color from black to reddish and ranged in size from 1 - 100 μm . The sample contained between 51 and 60% common clays and minerals and between 5 and 20% plant material. Other particles present in quantities less than 5% included fungal spores and plant fibers.

Sample Number: 1706003-002

Analysis began: 6/8/2017

Analyst: Jeffrey Kettelman

SOP: AP008MIC Analysis completed: 6/9/2017

EDS analysis of a metal particle showed elements carbon, oxygen, magnesium, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

This x-ray spectrum of a metal particle is consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as quartz and feldspar.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Laboratory Analysis Results

Request Number: 1706003

Analysis Code: AP008MIC

Qualifier Notes:

ND - not detected
NQ - concentration can not be quantified due to possible interferences or coelutions.
SDL - Sample Detection Limit (Limit of Detection adjusted for dilutions).
SQL - Sample Quantitation Limit (Limit of Quantitation adjusted for dilution).
INV - Invalid.
J - Reported concentration is below SDL.
L - Reported concentration is at or above the SDL and is below the lower limit of quantitation.
E - Reported concentration exceeds the upper limit of instrument calibration.
M - Result modified from previous result.
T - Data was not confirmed by a confirmational analysis. Compound and/or results is tentatively identified.
F - Established acceptance criteria was not met due to factors outside the laboratory's control.
H - Not all associated hold time specifications were met. Data may be biased.
C - Sample received with a missing or broken custody seal.
R - Sample received with a missing or incomplete chain of custody.
I - Sample received without a legible unique identifier.
G - Sample received in an improper container.
U - Sample received with insufficient sample volume.
W - Sample received with insufficient preservation.

TCEQ laboratory customer support may be reached at Frank.Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Susan Hoelscher

From: Thomas Haney
Sent: Tuesday, June 13, 2017 8:57 AM
To: Susan Hoelscher
Subject: FW: Request Report 1706003
Attachments: 1706003.pdf

From: Hattie Waites
Sent: Monday, June 12, 2017 16:13
To: Thomas Haney <Thomas.Haney@tceq.texas.gov>
Cc: Frank Martinez <Frank.Martinez@Tceq.Texas.Gov>
Subject: Request Report 1706003

Attached is your PDF file for Request Report 1706003.

You will not receive a hard copy.



ATTACHMENT 15
Laboratory Analysis Request No. 1706004

Total Pages: 4

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 – September 8, 2017

Texas Commission on Environmental Quality

Laboratory and Quality Assurance Section

P.O. Box 13087, MC-165

Austin, Texas 78711-3087

(512) 239-1716

Laboratory Analysis Results

Request Number: 1706004

Request Lead: Frank Martinez

Region: T14

Date Received: 6/5/2017

Facility(ies) Sampled	City	County	Facility Type
La Quinta Plant Voestalpine	Portland	San Patricio	Manufacturing

Sample(s) Received

Field ID Number: 1 Laboratory Sample Number: 1706004-001 Sampled by: Susan Hoelscher
 Sampling Site: Complainant's Property Date & Time Sampled: 05/30/17 16:15:00 Valid Sample: Yes
 Comments: Tape lift from car floor board (tan) located on the south side of the residence. (CMP 115)

Field ID Number: 2 Laboratory Sample Number: 1706004-002 Sampled by: Susan Hoelscher
 Sampling Site: Complainant's Property Date & Time Sampled: 05/30/17 16:17:00 Valid Sample: Yes
 Comments: Tape lift from an outdoor garage light bulb located on the south side of the residence in front (north) of the detailed car (Sample 1 above). (CMP 115)

Requested Laboratory Procedure(s):

Analysis: AP007MIC
 Environmental Sample Characterization using Polarized Light Microscopy

Analysis: AP008MIC
 Sample Characterization using Scanning Electron Microscope with an Energy Dispersive X-Ray Microanalysis Spectrometer
 Please note that this analytical technique is not capable of measuring all compounds which might have adverse health effects. For questions on the analytical procedures please contact the laboratory manager at (512) 239-1716. For an update on the health effects evaluation of these data, please contact the Toxicology Division at (512) 239-1795.

Analyst: Jeffrey Ketteman

Jeffrey Ketteman

Date: 6/12/17

Laboratory Manager: Frank Martinez

Frank Martinez

Date: 6/12/17

Laboratory Analysis Results

Request Number: 1706004

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1706004-001

Analysis began: 6/9/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 6/12/2017

Sample one was moderately loaded. Metal particles accounted for less than 5% of the particle coverage. Metal particles ranged in color from black to reddish and ranged in size from 5-100 μm . Paint chips accounted for over 80% of the particle coverage. The sample contained between 5 and 20% hair. Other particles present in quantities less than 5% included common clays and minerals and paper fibers.

Sample Number: 1706004-001

Analysis began: 6/9/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC Analysis completed: 6/12/2017

Energy dispersive spectroscopy (EDS) analysis of a metal particle showed elements carbon, oxygen, calcium, and iron. The primary peaks in the x-ray spectrum were carbon and iron.

This x-ray spectrum of a metal particle is consistent with the reference samples submitted with request number 1705011.

EDS analysis of a paint chip particle showed elements carbon, oxygen, sodium, magnesium, aluminum, silicon, sulfur, chlorine, potassium, calcium, and iron. The primary peaks in the x-ray spectrum were carbon, oxygen, silicon, chlorine, and calcium.

EDS analysis of several particles confirmed the presence of common clays and minerals such as limestone.

Sample Number: 1706004-002

Analysis began: 6/9/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 6/12/2017

Sample two was heavily loaded. The sample contained between 5 and 20% metal particles. Metal particles ranged in color from black to reddish and ranged in size from 1-80 μm . The sample contained between 5 and 20% common clays and minerals and between 61 and 70% fungal spores. Other particles present in quantities less than 5% included paint overspray, paper fibers, plant trichomes, and pollen.

Sample Number: 1706004-002

Analysis began: 6/9/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC Analysis completed: 6/12/2017

EDS analysis of a metal particle showed elements carbon, oxygen, sodium, aluminum, silicon, chlorine, calcium, and iron. The primary peaks in the x-ray spectrum were oxygen and iron.

This x-ray spectrum of a metal particle is consistent with the reference samples submitted with request number 1705011.

EDS analysis of several particles confirmed the presence of common clays and minerals such as salt (sodium chloride) and quartz.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Attachment 15

Inv. No. 1415945

Page 2 of 4

Laboratory Analysis Results

Request Number: 1706004

Analysis Code: AP008MIC

Qualifier Notes:

- ND - not detected
- NQ - concentration can not be quantified due to possible interferences or coelutions.
- SDL - Sample Detection Limit (Limit of Detection adjusted for dilutions).
- SQL - Sample Quantitation Limit (Limit of Quantitation adjusted for dilution).
- INV - Invalid.
- J - Reported concentration is below SDL.
- L - Reported concentration is at or above the SDL and is below the lower limit of quantitation.
- E - Reported concentration exceeds the upper limit of instrument calibration.
- M - Result modified from previous result.
- T - Data was not confirmed by a confirmational analysis. Compound and/or results is tentatively identified.
- F - Established acceptance criteria was not met due to factors outside the laboratory's control.
- H - Not all associated hold time specifications were met. Data may be biased.
- C - Sample received with a missing or broken custody seal.
- R - Sample received with a missing or incomplete chain of custody.
- I - Sample received without a legible unique identifier.
- G - Sample received in an improper container.
- U - Sample received with insufficient sample volume.
- W - Sample received with insufficient preservation.

TCEQ laboratory customer support may be reached at Frank.Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Susan Hoelscher

From: Hattie Waites
Sent: Monday, June 12, 2017 4:12 PM
To: Susan Hoelscher
Cc: Frank Martinez
Subject: Request Report 1706004
Attachments: 1706004.pdf

Attached is your PDF file for Request Report 1706004.

You will not receive a hard copy.



ATTACHMENT 16
Laboratory Analysis Request No. 1707002

Total Pages: 4

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 - September 8, 2017

Texas Commission on Environmental Quality

Laboratory and Quality Assurance Section

P.O. Box 13087, MC-165

Austin, Texas 78711-3087

(512) 239-1716

Laboratory Analysis Results

Request Number: 1707002

Request Lead: Frank Martinez

Region: T14

Date Received: 7/5/2017

Facility(ies) Sampled	City	County	Facility Type
La Quinta Plant Voestalpine	Portland	San Patricio	Manufacturing

Sample(s) Received

Field ID Number: A

Laboratory Sample Number: 1707002-001

Sampled by: Susan Hoelscher

Sampling Site: Complainant's Property

Date & Time Sampled: 06/23/17 10:12:00 Valid Sample: Yes

Comments: 30 second grab sample taken in ambient air while standing in the backyard of a citizen's property facing south/southeast.

Requested Laboratory Procedure(s):

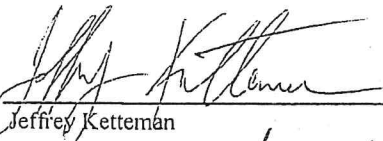
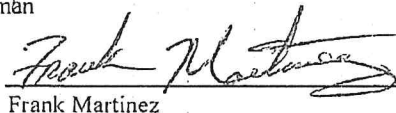
Analysis: AP007MIC

Environmental Sample Characterization using Polarized Light Microscopy

Analysis: AP008MIC

Sample Characterization using Scanning Electron Microscope with an Energy Dispersive X-Ray Microanalysis Spectrometer

Please note that this analytical technique is not capable of measuring all compounds which might have adverse health effects. For questions on the analytical procedures please contact the laboratory manager at (512) 239-1716. For an update on the health effects evaluation of these data, please contact the Toxicology Division at (512) 239-1795.

Analyst: Jeffrey Ketteman

Date: 7/9/17Laboratory Manager: Frank Martinez

Date: 7/7/17

Attachment 16

Inv. No. 1415945

Page 1 of 4

Laboratory Analysis Results

Request Number: 1707002

Analysis Code: AP007MIC & AP008MIC

Sample Number: 1707002-001

Analysis began: 7/7/2017

Analyst: Jeffrey Ketteman

SOP: AP007MIC Analysis completed: 7/7/2017

Sample A was lightly loaded. The sample contained between 31 and 40% metal particles. The metal particles range in size from 15 to 40 microns. The sample contained between 31 and 40% plant fibers and between 5 and 20% common clays and minerals. Other particles present in quantities less than 5% included fungal spores. There were two metal particles and one plant fiber that made for the majority of the particles on the subsample.

Sample Number: 1707002-001

Analysis began: 7/7/2017

Analyst: Jeffrey Ketteman

SOP: AP008MIC Analysis completed: 7/7/2017

Energy dispersive spectroscopy (EDS) analysis of a quartz particle showed elements carbon, oxygen, and silicon. The primary peaks in the x-ray spectrum were oxygen and silicon. There was not enough sample to confirm, by EDS, if the metal particles were consistent with reference samples in lab request number 1705011.

TCEQ laboratory customer support may be reached at Frank. Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Laboratory Analysis Results

Request Number: 1707002

Analysis Code: AP008MIC

Qualifier Notes:

- ND - not detected
- NQ - concentration can not be quantified due to possible interferences or coelutions.
- SDL - Sample Detection Limit (Limit of Detection adjusted for dilutions).
- SQL - Sample Quantitation Limit (Limit of Quantitation adjusted for dilution).
- INV - Invalid.
- J - Reported concentration is below SDL.
- L - Reported concentration is at or above the SDL and is below the lower limit of quantitation.
- E - Reported concentration exceeds the upper limit of instrument calibration.
- M - Result modified from previous result.
- T - Data was not confirmed by a confirmational analysis. Compound and/or results is tentatively identified.
- F - Established acceptance criteria was not met due to factors outside the laboratory's control.
- H - Not all associated hold time specifications were met. Data may be biased.
- C - Sample received with a missing or broken custody seal.
- R - Sample received with a missing or incomplete chain of custody.
- I - Sample received without a legible unique identifier.
- G - Sample received in an improper container.
- U - Sample received with insufficient sample volume.
- W - Sample received with insufficient preservation.

TCEQ laboratory customer support may be reached at Frank.Martinez@tceq.texas.gov

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans With Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at (512) 239-0010, (Fax 512-239-0055), or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, Texas 78711-3087.

Susan Hoelscher

From: Hattie Waites
Sent: Monday, July 10, 2017 3:32 PM
To: Susan Hoelscher
Cc: Frank Martinez
Subject: Request Report 1707002
Attachments: 1707002.pdf

Attached is your PDF file for Request Report 1707002.

You will not receive a hard copy.



ATTACHMENT 17
Gorilla Snot Safety Data Sheet and Dust Boss Spec Sheet

Total Pages: 14

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 - September 8, 2017



Product Data

DUST CONTROL

CHEMTREAT DT9087

GENERAL DESCRIPTION

CHEMTREAT DT9087 is a copolymer emulsion designed to be an eco-safe, biodegradable, liquid concentrate used to provide erosion control and dust suppression. CHEMTREAT DT9087 will not migrate away from treated areas and will not seep into the groundwater. It will not wash away in the rain and it does not re-emulsify with water. CHEMTREAT DT9087 is comprised of long, nanoparticle molecular structures that link and cross-link together to form strong bonds between particulates, soils and aggregates. Increased applications of CHEMTREAT DT9087 are highly effective for roads and other traffic areas. The product is designed to penetrate into the ground creating a strong and resilient, yet flexible, surface wear course that can withstand the intense abuse of vehicle traffic and environmental conditions.

GENERAL PROPERTIES

Form.....Opaque, white liquid
Odor.....Mild
Viscosity.....<100 cps @ 20°C
pH.....~6.5
Specific Gravity...1.039 @ 20°C
Density.....8.67 pounds/gallon
Freeze Point.....32°F / 0°C

DOSAGE AND FEEDING

CHEMTREAT DT9087 is designed to be easily applied topically to almost any soil or aggregate. A modest application will create a light surface crust that remains water permeable for air and water, yet perfect for controlling dust and suppressing PM10 and PM2.5 particulate matter to maintain air quality and visibility. CHEMTREAT DT9087 is typically applied topically to the surface at an initial rate of 0.5–20.0 percent solution covering between 10 to 800 ft². Maintenance coats are normally applied at 30% of the initial application rate. For optimum performance, CHEMTREAT DT9087 should be applied in accordance with the control parameters established by a ChemTreat representative for the specific application. CHEMTREAT DT9087 compatibilities with materials of construction are available upon request from a ChemTreat representative.

SAFETY PRECAUTIONS

For specific information on handling, safety and first aid, please review the product's Safety Data Sheet.

SHIPPING AND STORAGE

Do not freeze. Store above freeze point. If CHEMTREAT DT9087 freezes, then product is unusable. CHEMTREAT DT9087 is available in 275-gallon nonreturnable totes and bulk.

5/2017



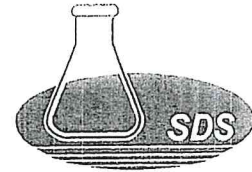
SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification

Product Name:	ChemTreat DT9087
Product Use:	Dust Control
Supplier's Name:	ChemTreat, Inc.
Emergency Telephone Number:	(800)424-9300 (Toll Free)
Address (Corporate Headquarters):	5640 Cox Road Glen Allen, VA 23060
Telephone Number for Information:	(800)648-4579
Date of SDS:	May 15, 2017
Revision Date:	May 15, 2017
Revision Number:	17051501AN

Section 2. Hazard(s) Identification

Signal Word:	None
GHS Classification(s):	Non-Hazardous Substance
Hazard Statement(s):	Non-Hazardous Substance
Precautionary Statement(s):	No significant health risks are expected from exposures under normal conditions of use.
Prevention:	None.
Response:	None.
Storage:	None.
Disposal:	None.
System of Classification Used:	Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).
Hazards Not Otherwise Classified:	None.



Section 3. Composition/Hazardous Ingredients

Component	CAS Registry #	Wt. %
Components not listed are either non hazardous or in concentration of less than 1%	N/A	N/A

Comments If chemical identity and/or exact percentage of composition has been withheld, this information is considered to be a trade secret.

Section 4. First Aid Measures

Inhalation: Call a POISON CENTER or doctor/physician if you feel unwell.

Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Skin: Call a poison center or doctor/physician if you feel unwell.

Ingestion: Rinse mouth. Call a poison center or doctor/physician if you feel unwell.

Most Important Symptoms: N/D

Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary: N/A

Section 5. Fire Fighting Measures

Flammability of the Product: Not flammable.

Suitable Extinguishing Media: Use extinguishing media suitable to surrounding fire.

Specific Hazards Arising from the Chemical: None known.

Protective Equipment: If product is involved in a fire, wear full protective clothing including a positive-pressure, NIOSH approved, self-contained breathing apparatus.



Section 6. Accidental Release Measures

- Personal Precautions:** Wear a self-contained breathing apparatus and appropriate Personal Protective Equipment (PPE).
- Environmental Precautions:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.
- Methods for Cleaning up:** Contain and recover liquid when possible. Flush spill area with water spray.
- Other Statements:** None.

Section 7. Handling and Storage

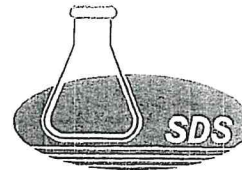
- Handling:** Wear appropriate Personal Protective Equipment (PPE) when handling this product. Do not get in eyes, or on skin and clothing. Wash thoroughly after handling. Do not ingest. Avoid breathing vapors, mist or dust.
- Storage:** Store away from incompatible materials (see Section 10). Store at ambient temperatures. Keep container securely closed when not in use. Label precautions also apply to empty container. Recondition or dispose of empty containers in accordance with government regulations. For Industrial use only. Do not freeze. Store above Freeze Point. If freezes, then product is unusable.

Section 8. Exposure Controls/Personal Protection

Exposure Limits

Component	Source	Exposure Limits
Components not listed are either non hazardous or in concentration of less than 1%	N/E	N/E

- Engineering Controls:** Use only with adequate ventilation. The use of local ventilation is recommended to control emission near the source.



Personal Protection

Eyes: Safety glasses are recommended if risk of eye contact.

Skin: Wear butyl rubber or neoprene gloves. Wash them after each use and replace as necessary. If conditions warrant, wear protective clothing such as boots, aprons, and coveralls to prevent skin contact.

Respiratory: None needed under normal conditions of use.

Section 9. Physical and Chemical Properties

Physical State and Appearance:	Liquid, White, Opaque
Specific Gravity:	1.039 @ 20 °C
pH:	6.5 @ 20 °C, 100.0%
Freezing Point:	32 °F
Flash Point:	N/A
Odor:	Mild
Melting Point:	N/D
Initial Boiling Point and Boiling Range:	>212 °F
Solubility in Water:	Complete
Evaporation Rate:	N/D
Vapor Density:	N/D
Molecular Weight:	N/D
Viscosity:	N/D
Flammability (solid, gas):	N/D
Flammable Limits:	N/A
Autoignition Temperature:	N/D
Density:	8.67 LB/GA
Vapor Pressure:	N/D
% VOC:	N/D
Odor Threshold	N/D
n-octanol Partition Coefficient	N/D
Decomposition Temperature	N/D

Section 10. Stability and Reactivity

Chemical Stability: Stable at normal temperatures and pressures.

Incompatibility with Various Substances: Strong oxidizers.

Hazardous Decomposition Products: None known.



Possibility of Hazardous Reactions: None known.

Reactivity: N/D

Conditions To Avoid: N/D

Section 11. Toxicological Information

Acute Toxicity

Chemical Name	Exposure	Type of Effect	Concentration	Species
ChemTreat DT9087	N/D	N/D	N/D	N/D

Carcinogenicity Category

Component	Source	Code	Brief Description
Components not listed are either non hazardous or in concentration of less than 1%	N/E	N/E	N/E

Likely Routes of Exposure: N/D

Symptoms

Inhalation: N/D
 Eye Contact: N/D
 Skin Contact: N/D
 Ingestion: N/D

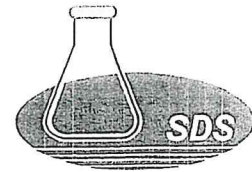
Skin Corrosion/Irritation: N/D

Serious Eye Damage/Eye Irritation: N/D

Sensitization: N/D

Germ Cell Mutagenicity: N/D

Reproductive/Developmental Toxicity: N/D



Specific Target Organ Toxicity

Single Exposure: N/D

Repeated Exposure: N/D

Aspiration Hazard: N/D

Comments: None.

Section 12. Ecological Information

Ecotoxicity

Species	Duration	Type of Effect	Test Results
N/D	N/D	N/D	N/D

Persistence and Biodegradability: N/D

Bioaccumulative Potential: N/D

Mobility In Soil: N/D

Other Adverse Effects: N/D

Comments: Not tested.

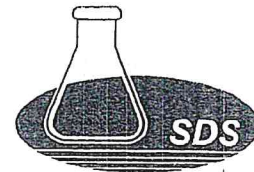
Section 13. Disposal Considerations

Dispose of in accordance with local, state and federal regulations.

Section 14. Transport Information

Controlling Regulation	UN/NA#:	Proper Shipping Name:	Technical Name:	Hazard Class:	Packing Group:
DOT	N/A	COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID	N/A	N/A	N/A

Note: N/A



Section 15. Regulatory Information

Inventory Status

United States (TSCA):
Canada (DSL/NDSL):

All ingredients listed.
All ingredients listed.

Federal Regulations

SARA Title III Rules

Sections 311/312 Hazard
Classes

Fire Hazard: No
Reactive Hazard: No
Release of Pressure: No
Acute Health Hazard: No
Chronic Health Hazard: No

Other Sections

Component	Section 313 Toxic Chemical	Section 302 EHS TPQ	CERCLA RQ
Components not listed are either non hazardous or in concentration of less than 1%	N/A.	N/A	N/A

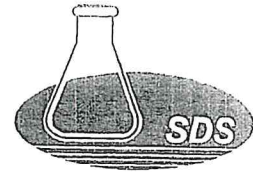
Comments: None.

State Regulations

California Proposition 65: None known.

Special Regulations

Component	States
Components not listed are either non hazardous or in concentration of less than 1%	None.



International Regulations

Canada

WHMIS Classification: N/A

Controlled Product Regulations (CPR): N/A

Compliance Information

NSF: N/A

Food Regulations: N/A

KOSHER: This product has not been evaluated for Kosher approval.

FIFRA: N/A

Other: None

Comments: None.

Section 16. Other Information

HMIS Hazard Rating

Health:	0
Flammability:	0
Physical Hazard:	0
PPE:	A

Notes: The PPE rating depends on circumstances of use. See Section 8 for recommended PPE. The Hazardous Material Information System (HMIS) is a voluntary, subjective alpha-numeric symbolic system for recommending hazard risk and personal protection equipment information. It is a subjective rating system based on the evaluator's understanding of the chemical associated risks. The end-user must determine if the code is appropriate for their use.

Abbreviations

Abbreviation	Definition
<	Less Than
>	Greater Than
ACGIH	American Conference of Governmental Industrial Hygienists



Abbreviation	Definition
EHS	Environmental Health and Safety Dept
N/A	Not Applicable
N/D	Not Determined
N/E	Not Established
OSHA	Occupational Health and Safety Dept
PEL	Personal Exposure Limit
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weight Average
UNK	Unknown

Prepared by: Product Compliance Department; ProductCompliance@chemtreat.com

Revision Date: May 15, 2017

Disclaimer

Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, ChemTreat, Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will ChemTreat, Inc. be responsible for damages of any nature whatsoever resulting from the use or reliance upon information. No representation or warranties, either expressed or implied, of merchantability, fitness for a particular purpose, or of any other nature are made hereunder with respect to information or the product to which information refers.



DUSTBOSS® 60

The DB-60 is capable of covering more than 125,000 square feet (11,613 square meters) with its powerful dust-trapping mist when equipped with optional user-definable oscillation (up to 359°).

The DB-60 is also available as a tower-mounted unit for applications requiring dust capture from above.

SPECIFICATIONS

GENERAL SPECIFICATIONS

- ▣ Throw: 200 feet (60 meters).
- ▣ Fan: 30,000 CFM (849.50 CMM) generated by 25 HP fan.
- ▣ Coverage with standard 0°–40° oscillation: 21,000 square feet (1,950 square meters).
- ▣ Coverage with optional 359° user-definable oscillation: 125,000 square feet (11,613 square meters).
- ▣ Adjustable throw angle: 0°–50°.
- ▣ Nozzles: 30, brass (also available in stainless and nylon).
- ▣ Droplet size: of 50–200 microns.
- ▣ Premium efficiency direct-drive motor.

ELECTRICAL SPECIFICATIONS

- ▣ U.S.: 3 Phase / 25 HP fan / 480 Volt / 60 Hertz. Full load current: 46 amps. 60 Kw gen set is recommended.
- ▣ Other motor options available, including all international electrical motors.
- ▣ 10 HP (7.5 Kw) high-pressure booster pump with no lift.
- ▣ Oscillator: 1/8 HP (0.10 Kw).
- ▣ 150 foot (45.72 meters) 8/4 type W electrical cord.
- ▣ Bare wired electrical cord (no male plug).
- ▣ NEMA 3R cabinet with control panel.

WATER REQUIREMENTS

- ▣ 10 PSI (0.69 BAR) constant pressure must be delivered to booster pump.
- ▣ Maximum inlet water pressure should not exceed 100 PSI (6.89 BAR) when operating the booster pump.
- ▣ Maximum PSI delivered by booster pump is 250 PSI (17.24 BAR).
- ▣ In-line 30 mesh (595 micron) filter system is included and should be used at all times.
- ▣ Contact us for recommendations if using non-potable water.
- ▣ Connection: 1-1/2" (38.10 mm) cam-and-groove quick disconnect female coupling for fire hose provided on machine.

MAINTENANCE

- ▣ If using potable water, nozzles need to be inspected once a year.
- ▣ Fan motor and high pressure pump should be greased every 10,000 hours.
- ▣ Turntable bearing should be greased on a regular maintenance schedule, or as needed.

NOISE

- ▣ Between 86 and 100 decibels at 0 feet.

PERFORMANCE ADDITIVES

- ▣ Full line of DustBoss surfactants, tackifying agents, or odor control agents can be used with optional dosing pump.

OPTIONS

- ▣ Unit is available with optional user-definable oscillation to allow up to 359° of movement. Standard oscillation provides 0°–40° of movement.
- ▣ Available on frame with skid mount or on a tower. Standard unit comes on three-wheeled carriage.
- ▣ Dosing pump can be added to unit for chemical applications.

DIMENSIONS

(standard carriage mount)

- ▣ 6.75 feet (81 inches or 2.06 meters) wide.
- ▣ 9.75 feet (117 inches or 2.97 meters) long.
- ▣ 7.17 feet (86 inches or 2.19 meters) tall.
- ▣ 1,800 lbs. (816.50 kilograms).

ENGLISH UNITS

Supplied Water Pressure, psi	40	60	80	100
Water Flow with Booster Pump, gpm	22.2	23.9	25.4	26.7
Water Flow, no Booster Pump, gpm	12	14.6	16.9	18.9

METRIC UNITS

Supplied Water Pressure, bar	2.8	4.14	5.5	6.89
Water Flow with Booster Pump, lpm	84	90.5	96.1	101.1
Water Flow, no Booster Pump, lpm	45.4	55.3	64	71.5

1½" Fire Hose Water Supply

OUR WARRANTY

3-year/3,000-hour warranty.



DUSTBOSS® 100

Engineered to fight dust on the largest and toughest of work sites, the DB-100 is the biggest DustBoss ever designed.

With its muscular 60 HP motor and user-definable 359° oscillation, the DB-100 has a throw of more than 100 meters, giving the machine an incredible coverage area of 280,000 square feet (31,000 square meters).

SPECIFICATIONS

GENERAL SPECIFICATIONS

- ▣ Throw: 328 feet (100 meters).
- ▣ Coverage: 280,000 square feet (31,000 square meters) coverage.
- ▣ Custom user-definable oscillation up to 359° includes integrated turntable bearing that enables user to manually override oscillator and quickly reposition fan barrel.
- ▣ Adjustable throw angle: 0° to 50°.
- ▣ Nozzles: 30 brass (also available in stainless and nylon)
- ▣ Droplet size: 50–200 microns.
- ▣ Premium efficiency direct-drive motor.

ELECTRICAL SPECIFICATIONS

- ▣ U.S.: 3 Phase / 60 HP fan / 480 Volt / 60 Hertz. Full load current: 91 amps. Start-up amps (in rush) = 360 amps. 150 Kw gen set is recommended.
- ▣ Other motor options available, including all international electrical motors.
- ▣ 10 HP (7.5 Kw) high-pressure booster pump with no lift.
- ▣ Oscillator: 1/8 HP (0.10 Kw).
- ▣ 150 foot (30.48 meters) 4/4 Type W Power Cord.
- ▣ Bare wired electrical cord (no male plug).
- ▣ NEMA 3R cabinet with control panel.
- ▣ Soft start.

WATER REQUIREMENTS

- ▣ 10 PSI (0.69 BAR) constant pressure must be delivered to booster pump.
- ▣ Maximum inlet water pressure should not exceed 100 PSI (6.89 BAR) when operating the booster pump.
- ▣ Maximum PSI delivered by booster pump is 250 PSI (17.24 BAR).
- ▣ In-line 30 mesh (595 micron) filter system is included and should be used at all times.
- ▣ Contact us for recommendations if using non-potable water.
- ▣ Connection: 1-1/2" (38.10 mm) cam-and-groove quick disconnect female coupling for fire hose provided on machine.

MAINTENANCE

- ▣ If using potable water, nozzles need to be inspected once a year.
- ▣ Fan motor and high pressure pump should be greased every 10,000 hours.
- ▣ Turntable bearing should be greased on a regular maintenance schedule or as needed.

PERFORMANCE ADDITIVES

- ▣ Full line of DustBoss surfactants, tackifying agents, or odor control agents can be used with optional dosing pump.

OPTIONS

- ▣ Available on a tower. Standard unit comes on skid mount.
- ▣ Dosing pump can be added to unit for chemical applications.

DIMENSIONS

(standard skid mount)

- ▣ 5.69 feet (68 inches or 1.73 meters) wide.
- ▣ 9.95 feet (119 inches or 2.99 meters) long.
- ▣ 7.75 feet (93 inches or 2.36 meters) tall.
- ▣ 3,200 lbs. (1451.50 kilograms).

ENGLISH UNITS

Supplied Water Pressure, psi	40	60	80	100
Water Flow with Booster Pump, gpm	37.2	37.5	38.1	39
Water Flow, no Booster Pump, gpm	17.7	21.9	25.5	28.2

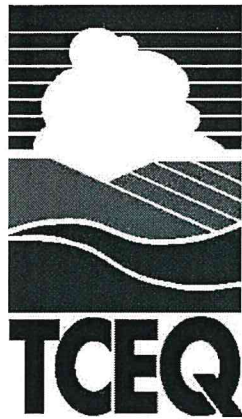
METRIC UNITS

Supplied Water Pressure, bar	2.8	4.14	5.5	6.89
Water Flow with Booster Pump, lpm	141	142	144.2	147.6
Water Flow, no Booster Pump, lpm	67	82.9	96.5	106.7

1½" Fire Hose Water Supply

OUR WARRANTY

3-year/3,000-hour warranty.



ATTACHMENT 18
July 13, 2017 Photographs

Total Pages: 7

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 - September 8, 2017



Subject: EPN 41-Remet
Location: North side of Voestalpine's property
Direction: Facing northeast
City: Portland
County: San Patricio
Date: July 13, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 1



Subject: EPN 42-HBI Chips/Fines
Location: North side of Voestalpine's property
Direction: Facing east
City: Portland
County: San Patricio
Date: July 13, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 2



Subject: EPN 51 (Sold)-HBI
Location: South side of Voestalpine's property
Direction: Facing east
City: Portland
County: San Patricio
Date: July 13, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 3



Subject: EPNs 52, 53, 54-HDRI Clusters, HBI Startup (Mix HBI Chips/Remet), HBI Warm up (Mix HBI/DRI)
Location: South side of Voestalpine's property
Direction: Facing northeast
City: Portland
County: San Patricio
Date: July 13, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location: TCEQ Corpus Christi Regional Office
Photo No. 4



Subject: Dust Boss 60
Location: East side of Voestalpine's property
Direction: Facing southwest
City: Portland
County: San Patricio
Date: July 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location: TCEQ Corpus Christi Regional Office
Photo No. 5



Subject: Dust Boss 60
Location: East side of Voestalpine's property
Direction: Facing southwest
City: Portland
County: San Patricio
Date: July 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location: TCEQ Corpus Christi Regional Office
Photo No. 6



Subject: EPN 45-Iron Ore Pellets RH20
Location: South side of Voestalpine's property
Direction: Facing northwest
City: Portland
County: San Patricio
Date: July 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 7



Subject: EPN 46-Iron Ore Pellets LKAB BFP
Location: South side of Voestalpine's property
Direction: Facing northeast
City: Portland
County: San Patricio
Date: July 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 8



Subject: EPN 46-Iron Ore Pellets LKAB BFP
Location: South side of Voestalpine's property
Direction: Facing northeast
City: Portland
County: San Patricio
Date: July 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 9



Subject: EPN 46-Iron Ore Pellets LKAB BFP
Location: South side of Voestalpine's property
Direction: Facing northwest
City: Portland
County: San Patricio
Date: July 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 10



Subject: EPN 62-Iron Ore Sludge
Location: South side of Voestalpine's property
Direction: Facing northwest
City: Portland
County: San Patricio
Date: July 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 11



Subject: EPN 61-HBI Sludge
Location: South side of Voestalpine's property
Direction: Facing northwest
City: Portland
County: San Patricio
Date: July 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 12



Subject: EPN 59-RH20 Iron Ore Coated Pellets
Location: South side of Voestalpine's property
Direction: Facing northwest
City: Portland
County: San Patricio
Date: July 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 13



Subject: EPN 60-RH20 Iron Ore Coated Pellets
Location: South side of Voestalpine's property
Direction: Facing northwest
City: Portland
County: San Patricio
Date: July 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 14



Subject: EPNs 47 & 48-Iron Ore Fines
Location: South side of Voestalpine's property
Direction: Facing north
City: Portland
County: San Patricio
Date: July 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 15



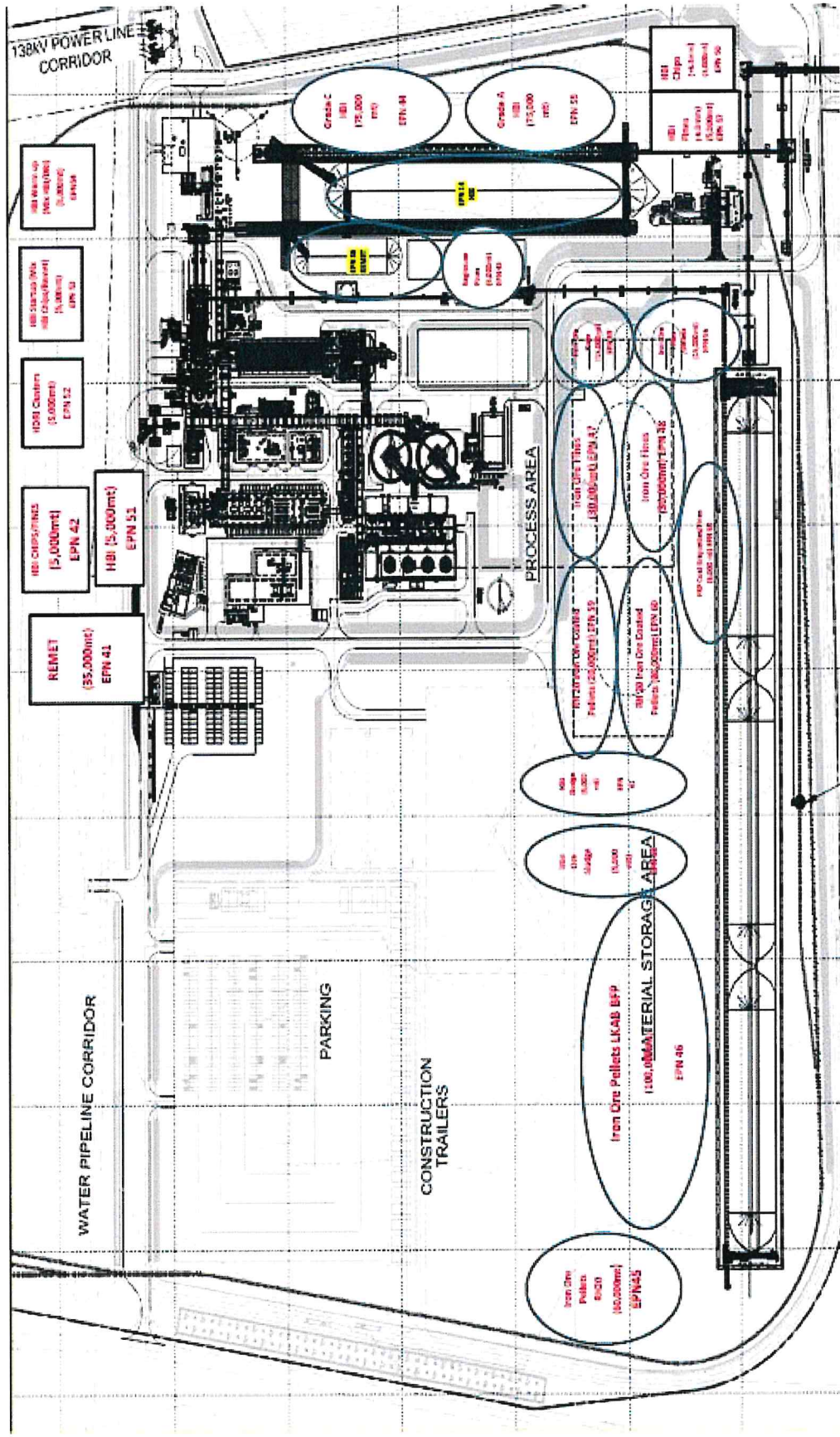
Subject: Dust Boss 60
Location: South side of Voestalpine's property
Direction: Facing northeast
City: Portland
County: San Patricio
Date: July 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 16



Subject: EPNs 56 (front) & 49 (back)-Iron Ore Fines
Location: South side of Voestalpine's property
Direction: Facing northeast
City: Portland
County: San Patricio
Date: July 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 17



Subject: EPNs 49 (front) & 56 (left)-Iron Ore Fines
Location: South side of Voestalpine's property
Direction: Facing southwest
City: Portland
County: San Patricio
Date: July 23, 2017
Photographer: Susan Hoelscher, Air Investigator
Digital File Location:
TCEQ Corpus Christi Regional Office
Photo No. 18





ATTACHMENT 19
Additional Information

Total Pages: 20

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 - September 8, 2017

Susan,

Please see below and attached for voestalpine Texas LLC's response to the May 31, 2017 TCEQ information request.

- (1) *Provide a brief timeline of activities at Voestalpine from start of operations to date including all MSS activities.*

Approximate Timeline of Activity

July 20, 2016: Water Trucks in Service

September 28, 2016: Official Operational Date

January-February 2017: Hot Commissioning of FRP Plant

February 17, 2017: Outside Storage of Iron Oxide Pellets

April 13, 2017-May 17 2017: Temporary Screening of Material

May 18, 2017: Began Tarp Installation on Storage Piles

June 5, 2017: Dust Boss Units in Operation

*See spreadsheet for Inbound/Outbound Vessels and MSS activities.

- (2) *Provide documentation of fugitive suppressant usage for the storage piles and associated operations from start of operations to date.*

*Water trucks have been in service, at a minimum, since approximately July 20, 2016 (see invoices). Placement of Tarps began approximately May 18, 2017. Dust Boss units were put into service June 5, 2017. Chemical suppressants are currently being explored.

- (3) *Provide documentation of the quarterly visible emissions observations performed on fugitive sources since the start of operations (NSR Permit No. 108113 Special Condition 7). If visible emissions were observed during the quarterly observations, provide the Method 22 evaluation.*

*See attached. No visible fugitive emissions have been observed leaving the facility property.

- (4) *According to NSR Permit No. 108113 Special Condition 17, iron ore pellets shall be stored in enclosed storage. During sampling conducted at Voestalpine on May 24, 2017, it was documented that some iron ore pellets are stored outside. Please provide documentation indicating when outside storage of iron ore pellets began.*

*Outside storage of Iron Oxide Pellets began on February 17, 2017. The emission sources associated with the storage piles qualify for a PBR under the general requirements of 30 TAC 106.4 and the specific requirements of 30 TAC 106.261. (Registration No. 147082)


Shannon L. Parham
Environmental Manager

voestalpine
ONE STEP AHEAD.

Susan Hoelscher

From:
Sent: Wednesday, June 14, 2017 2:49 PM
To: Susan Hoelscher
Cc:
Subject: RE: Information Request
Attachments: Core Ahern Water Truck Invoices.pdf; Activity Timeline.xlsx; 05252017.pdf; Timeline of Activity.pdf

Susan,

Please see attached in response to the May 31, 2017 additional information request.

Best Regards,
Shannon

Shannon L. Parham
Environmental Manager

voestalpine Texas LLC
2800 Kay Bailey Hutchison Road
Portland, Texas 78374, United States
M. +1 361 229 2865
T. +1 361 704 9000
F. +1 361 704 9090

www.voestalpine.com/texas

voestalpine - One step ahead.

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

From: Susan Hoelscher [mailto:Susan.Hoelscher@tceq.texas.gov]
Sent: Wednesday, May 31, 2017 3:25 PM
To: Parham Shannon
Cc: ; Kelly Ruble; Sonny Lopez
Subject: Information Request

Good Afternoon Shannon,

I would like to request some additional information regarding operations at Voestalpine (see below).

- (1) Provide a brief timeline of activities at Voestalpine from start of operations to date including all MSS activities.
- (2) Provide documentation of fugitive suppressant usage for the storage piles and associated operations from start of operations to date.
- (3) Provide documentation of the quarterly visible emissions observations performed on fugitive sources since the start of operations (NSR Permit No. 108113 Special Condition 7). If visible emissions were observed during the quarterly observations, provide the Method 22 evaluation.

- (4) According to NSR Permit No. 108113 Special Condition 17, iron ore pellets shall be stored in enclosed storage. During sampling conducted at Voestalpine on May 24, 2017, it was documented that some iron ore pellets are stored outside. Please provide documentation indicating when outside storage of iron ore pellets began.

Please provide this information to me by next week Wednesday, June 7, 2017, or sooner, if possible. Feel free to contact me or Kelly if you have any questions or concerns.

Thank you,

Susan Hoelscher

Air Investigator

TCEQ Region 14-Corpus Christi

(P) 361-825-3118 (F) 361-825-3101

susan.hoelscher@tceq.texas.gov

voestalpine Texas LLC
 Opacity Reading Program
 Issued: 3/10/2016
 Revalidated:

Opacity
 Procedure No. VSP-005
 Revision No. 0

VEF 005

Daily Inspection Sheet							
Day	Mon	Tue	Wed	Thur	Fri	Sat	Sun
Date:				5/25/17			

Equipment							
BSG Dust Collection Scrubber Stack							
Briquetter Dedusting							
HBI Cooling Conveyor							
Hot Pressure Relief Vent							

(TCEQ Number 108113 and PSDTX1344)

Sources	EPN	Limit	Parameter	Condition	Comments
Furnace Dedusting Bottom Seal Gas (BSG) Dust Collection Wet Scrubber Stack	8	5% Opacity	Opacity	30	Daily visible Emission Inspections per CAM (40 CFR Part 64)
Briquetter Dedusting	9	5% Opacity	Opacity	30	Inspections per CAM (40 CFR Part 64)
HBI Cooling Conveyor	11	5% Opacity	Opacity	30	Daily visible Emission Inspections per CAM (40 CFR Part 64)
Hot Pressure relief Vent	38	0% Opacity	Opacity	30	Daily visible Emission Inspections per CAM (40 CFR Part 64)

Table to be used for Reference purposes only

Property Visual Inspection	Any visible emissions from buildings or fugitive sources leaving the property boundary? (Y/N)
Name: <i>[Signature]</i> Dominick Hernandez	N

SEND PAYMENTS TO:

AHERN RENTALS
 PO BOX 271390
 LAS VEGAS NV 89127-1390
 TEL: 702-647-8100
 FAX: 702-647-9866



CUSTOMER ASSISTANCE:

CORPUS CHRISTI
 7925 BEARDEN DR
 CORPUS CHRISTI TX 78409-20
 TEL: 361-288-8190
 FAX: 361-288-8191
 MON - FRI 6:00-5:00
 SATURDAY CLOSED
 SUNDAY CLOSED

RENTAL INVOICE

** COPY **

Customer:

CORE SUPPLIES & MATERIALS
 2166 STATE HIGHWAY 35 BYPASS
 ARANSAS PASS TX 78336-0000

Customer #.. 291027

Invoice #... 16762616-8

Invoice Date 5/03/17

Date Out.... 10/27/16 12:00 PM

Date In..... 5/01/17 2:11 PM

Job Loc..... VOESTAPLINE;LAS QUINTA TERM

Job #..... VOESTAPLINE

P.O. #..... NA

Ordered By.. TRENO/MATT/REX

Written By.. REXDA

Sales Rep... 4901 - MATTHEW E ANDERSON

Terms..... Net 10 Days

Job Site:

VOESTAPLINE
 LA QUINTA TERMINAL
 PORTLAND, TX 78374

CH#: 832-452-1681 J#: 832-452-1681
 Map page/grid: X/X

Qty	Equipment	Min	Day	Week	4 Week	Amount
-----	-----------	-----	-----	------	--------	--------

1	TRUCK, WATER, 2000 GAL-CDL REQUIRED EQP#: 75244	265.00	265.00	841.50	2360.00	N/C
MI OUT: 17245.00 MI IN: 18556.00 TOTAL:		1311.00				

Core Supplies > Trino 361-728-5478
 Customer Call Off/Special Rates
 FINAL BILL: 5/11/17 12:00 PM THRU 5/01/17 02:11 PM.

IF THE EQUIPMENT(S) DOES NOT WORK PROPERLY, IMMEDIATELY DISCONTINUE USE AND NOTIFY CUSTOMER ASSISTANCE AT ONCE **MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY** **CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS**

- Damage Waiver (12% of gross rental charges) will be charged absent proof of insurance (see reverse side of this Rental Out Contract).
- Customer must contact Customer Assistance to obtain call off rental number and is responsible for the Equipment(s) until it is picked up within a commercially reasonable time.
- If Customer fails to return the Equipment(s) within the time specified above, Customer is deemed to have renewed the Rental Out Contract on the same terms and conditions.
- Compliance with California Air Resources Board (CARB) Idling Regulation (Title 13, California Code of Regulations 12443(d)(3): Any in-use off-road diesel vehicle may not idle for more than 5 consecutive minutes. Customer is responsible for compliance with CARB off-road diesel engine idling limits and is responsible for any penalties or fines incurred for non-compliance.

This Rental Out Contract consists of both sides of this document. I have had the opportunity to read the terms and conditions on both sides of this Rental Out Contract and have been instructed in the proper use and operation of the Equipment(s) delivered and will ensure that all operators receive this training and the instructions contained in the manufacturer's operation manual, a copy of which has been provided with the Equipment(s), which will be read by each operator. I have been familiarized with the location, purpose, and function of all (a) operating controls, (b) safety devices, and (c) manuals of the specific Equipment(s) rented herein. I have read and understood the instructions provided, and all questions have been answered to my satisfaction.

By signing below, I represent and warrant that I am of legal age, I am vested with the authority and power to sign this Rental Out Contract on behalf of the Customer, and I am authorized to bind the Customer to the terms and conditions set forth in this Rental Out Contract, including the terms and conditions located on the reverse side hereof.

X CUSTOMER SIGNATURE _____ DATE _____ NAME PRINTED _____ DELIVERED BY _____ DATE _____

Terms: Payment Due within 10 days of invoice. A finance charge of 2% per month will be added to past due accounts.

Please visit us on the web at www.Ahern.com or you may call our 24 hour service at 800-400-1610.

SEND PAYMENTS TO:

AHERN RENTALS
 PO BOX 271390
 LAS VEGAS NV 89127-1390
 TEL: 702-647-8100
 FAX: 702-647-9866



CUSTOMER ASSISTANCE:

CORPUS CHRISTI
 7925 BEARDEN DR
 CORPUS CHRISTI TX 78409-20
 TEL: 361-288-8190
 FAX: 361-288-8191
 MON - FRI 6:00-5:00
 SATURDAY CLOSED
 SUNDAY CLOSED

CYCLE INVOICE

** COPY **

Customer:

CORE SUPPLIES & MATERIALS
 2166 STATE HIGHWAY 35 BYPASS
 ARANSAS PASS TX 78336-0000

Customer #.. 291027
 Invoice #... 16762616-7
 Invoice Date 4/30/17
 Date Out.... 10/27/16 12:00 PM
 Billed thru. 5/11/17
 Job Loc..... VOESTAPLINE;LAS QUINTA TERM
 Job #..... VOESTAPLINE
 P.O. #..... NA
 Ordered By.. TRENO/MATT/REX
 Written By.. CYCLE BILL
 Sales Rep... 4901 - MATTHEW E ANDERSON
 Terms..... Net 10 Days

Job Site:

VOESTAPLINE
 LA QUINTA TERMINAL
 PORTLAND, TX 78374
 C#: 832-452-1681 J#: 832-452-1681
 Map page/grid: X/X

Qty	Equipment	Min	Day	Week	4 Week	Amount
-----	-----------	-----	-----	------	--------	--------

1	TRUCK, WATER, 2000 GAL-CDL REQUIRED	265.00	265.00	841.50	2360.00	2360.00
	EQP#: 75244 Make: FORD Model: F-650 Ser #: 3FRNF65A48V656930					
	MI OUT: 17245.00 MI IN: TOTAL: 17245.00					

SALES ITEMS:

Qty	Item number	Unit	Price	Amount
1	160642	EA	7.500	7.50
	ENVIRONMENTAL CHARGE			

Core Supplies > Trino 361-728-5478
 Customer Call Off/Special Rates

Rental-total: 2367.50
 Damage waiver: 283.20
 (8.25%) Tax: 218.68
 Total: 2869.38

BILLED FOR FOUR WEEKS 4/13/17 THRU 5/11/17

IF THE EQUIPMENT(S) DOES NOT WORK PROPERLY, IMMEDIATELY DISCONTINUE USE AND NOTIFY CUSTOMER ASSISTANCE AT ONCE **MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY** **CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS**

1. Damage Waiver (12% of gross rental charges) will be charged absent proof of insurance (see reverse side of this Rental Out Contract).
 2. Customer must contact Customer Assistance to obtain call off rental number and is responsible for the Equipment(s) until it is picked up within a commercially reasonable time.
 3. If Customer fails to return the Equipment(s) within the time specified above, Customer is deemed to have renewed the Rental Out Contract on the same terms and conditions.
 4. Compliance with California Air Resources Board (CARB) Idling Regulation (Title 13, California Code of Regulations 124491(d)(3): Any in-use off-road diesel engine vehicle may not idle for more than 5 consecutive minutes. Customer is responsible for compliance with CARB off-road diesel engine idling limits and is responsible for any penalties or fines incurred for non-compliance.
 This Rental Out Contract consists of both sides of this document. I have had the opportunity to read the terms and conditions on both sides of this Rental Out Contract and have been instructed in the proper use and operation of the Equipment(s) delivered and will ensure that all operators receive this training and the instructions contained in the manufacturer's operation manual, a copy of which has been provided with the Equipment(s), which will be read by each operator. I have been familiarized with the location, purpose, and function of all (a) operating controls, (b) safety devices, and (c) manuals of the specific Equipment(s) rented herein. I have read and understood the instructions provided, and all questions have been answered to my satisfaction.
 By signing below, I represent and warrant that I am of legal age, I am vested with the authority and power to sign this Rental Out Contract on behalf of the Customer, and I am authorized to bind the Customer to the terms and conditions set forth in this Rental Out Contract, including the terms and conditions located on the reverse side hereof.

CUSTOMER SIGNATURE DATE NAME PRINTED DELIVERED BY DATE

Terms: Payment Due within 10 days of invoice. A finance charge of 2% per month will be added to past due accounts.

Please visit us on the web at www.Ahern.com or you may call our 24 hour service at 800-400-1610.

SEND PAYMENTS TO:

AHERN RENTALS
 PO BOX 271390
 LAS VEGAS NV 89127-1390
 TEL: 702-647-8100
 FAX: 702-647-9866



CUSTOMER ASSISTANCE:

CORPUS CHRISTI
 7925 BEARDEN DR
 CORPUS CHRISTI TX 78409-20
 TEL: 361-288-8190
 FAX: 361-288-8191
 MON - FRI 6:00-5:00
 SATURDAY CLOSED
 SUNDAY CLOSED

CYCLE INVOICE

** COPY **

Customer:
 CORE SUPPLIES & MATERIALS
 2166 STATE HIGHWAY 35 BYPASS
 ARANSAS PASS TX 78336-0000

Job Site:
 VOESTAPLINE
 LA QUINTA TERMINAL
 PORTLAND, TX 78374
 C#: 832-452-1681 J#: 832-452-1681
 Map page/grid: X/X

Customer #.. 291027
 Invoice #... 16762616-6
 Invoice Date 4/02/17
 Date Out... 10/27/16 12:00 PM
 Billed thru. 4/13/17
 Job Loc..... VOESTAPLINE;LAS QUINTA TERM
 Job #..... VOESTAPLINE
 P.O. #..... NA
 Ordered By.. TRENO/MATT/REX
 Written By.. CYCLE BILL
 Sales Rep... 4901 - MATTHEW E ANDERSON
 Terms..... Net 10 Days

Qty	Equipment	Min	Day	Week	4 Week	Amount
-----	-----------	-----	-----	------	--------	--------

1	TRUCK, WATER, 2000 GAL-CDL REQUIRED EQP#: 75244 Make: FORD Model: F-650 Ser #: 3FRNF65A48V656930 MI OUT: 17245.00 MI IN: TOTAL: 17245.00	265.00	265.00	841.50	2360.00	2360.00
---	--	--------	--------	--------	---------	---------

SALES ITEMS:

Qty	Item number	Unit	Price	
1	160642	EA	7.500	7.50
	ENVIRONMENTAL CHARGE			

Core Supplies > Trino 361-728-5478
 Customer Call Off/Special Rates Rental-total: 2367.50
 Damage waiver: 283.20
 Taxable Sub-total: 2650.70 (8.25%) Tax: 218.68
 Total: 2869.38
 BILLED FOR FOUR WEEKS 3/16/17 THRU 4/13/17

IF THE EQUIPMENT(S) DOES NOT WORK PROPERLY, IMMEDIATELY DISCONTINUE USE AND NOTIFY CUSTOMER ASSISTANCE AT ONCE **MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY** **CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS**

1. Damage Waiver (12% of gross rental charges) will be charged absent proof of insurance (see reverse side of this Rental Out Contract).
 2. Customer must contact Customer Assistance to obtain call off rental number and is responsible for the Equipment(s) until it is picked up within a commercially reasonable time.
 3. If Customer fails to return the Equipment(s) within the time specified above, Customer is deemed to have renewed the Rental Out Contract on the same terms and conditions.
 4. Compliance with California Air Resources Board (CARB) Idling Regulation (Title 13, California Code of Regulations #2449(d)(1)(3): Any in-use off-road diesel vehicle may not idle for more than 5 consecutive minutes. Customer is responsible for compliance with CARB off-road diesel engine idling limits and is responsible for any penalties or fines incurred for non-compliance.
 This Rental Out Contract consists of both sides of this document. I have had the opportunity to read the terms and conditions on both sides of this Rental Out Contract and have been instructed in the proper use and operation of the Equipment(s) delivered and will ensure that all operators receive this training and the instructions contained in the manufacturer's operation manual, a copy of which has been provided with the Equipment(s), which will be read by each operator. I have been familiarized with the location, purpose, and function of all (a) operating controls, (b) safety devices, and (c) manuals of the specific Equipment(s) rented herein. I have read and understood the instructions provided, and all questions have been answered to my satisfaction.
 By signing below, I represent and warrant that I am of legal age, I am vested with the authority and power to sign this Rental Out Contract on behalf of the Customer, and I am authorized to bind the Customer to the terms and conditions set forth in this Rental Out Contract, including the terms and conditions located on the reverse side hereof.

X CUSTOMER SIGNATURE _____ DATE _____ NAME PRINTED _____ DELIVERED BY _____ DATE _____

Terms: Payment Due within 10 days of invoice. A finance charge of 2% per month will be added to past due accounts.

Please visit us on the web at www.Ahern.com or you may call our 24 hour service at 800-400-1610.

Attachment 19
 Inv. No. 1415945
 Page 7 of 20

SEND PAYMENTS TO:

AHERN RENTALS
 PO BOX 271390
 LAS VEGAS NV 89127-1390
 TEL: 702-647-8100
 FAX: 702-647-9866



CUSTOMER ASSISTANCE:

CORPUS CHRISTI
 7925 BEARDEN DR
 CORPUS CHRISTI TX 78409-20
 TEL: 361-288-8190
 FAX: 361-288-8191
 MON - FRI 6:00-5:00
 SATURDAY CLOSED
 SUNDAY CLOSED

CYCLE INVOICE
 ** COPY **

Customer:
 CORE SUPPLIES & MATERIALS
 2166 STATE HIGHWAY 35 BYPASS
 ARANSAS PASS TX 78336-0000

Job Site:
 VOESTAPLINE
 LA QUINTA TERMINAL
 PORTLAND, TX 78374

C#: 832-452-1681 J#: 832-452-1681
 Map page/grid: X/X

Customer #.. 291027
 Invoice #... 16762616-5
 Invoice Date 3/05/17
 Date Out.... 10/27/16 12:00 PM
 Billed thru. 3/16/17
 Job Loc..... VOESTAPLINE;LAS QUINTA TERM
 Job #..... VOESTAPLINE
 P.O. #..... NA
 Ordered By.. TRENO/MATT/REX
 Written By.. CYCLE BILL
 Sales Rep... 4901 - MATTHEW E ANDERSON
 Terms..... Net 10 Days

Qty	Equipment	Min	Day	Week	4 Week	Amount
-----	-----------	-----	-----	------	--------	--------

1	TRUCK, WATER, 2000 GAL-CDL REQUIRED EQP#: 75244 Make: FORD Model: F-650 Ser #: 3FRNF65A48V656930 MI OUT: 17245.00 MI IN: TOTAL: 17245.00	265.00	265.00	841.50	2360.00	2360.00
---	--	--------	--------	--------	---------	---------

SALES ITEMS:

Qty	Item number	Unit	Price	Amount
1	160642 ENVIRONMENTAL CHARGE	EA	7.500	7.50

Core Supplies > Trino 361-728-5478
 Customer Call Off/Special Rates Rental-total: 2367.50
 Taxable Sub-total: 2650.70 (8.25%) Tax: 218.68
 Total: 2869.38

BILLED FOR FOUR WEEKS 2/16/17 THRU 3/16/17

IF THE EQUIPMENT(S) DOES NOT WORK PROPERLY, IMMEDIATELY DISCONTINUE USE AND NOTIFY CUSTOMER ASSISTANCE AT ONCE **MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY** **CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS**

1. Damage Waiver (12% of gross rental charges) will be charged absent proof of insurance (see reverse side of this Rental Out Contract).
 2. Customer must contact Customer Assistance to obtain call off rental number and is responsible for the Equipment(s) until it is picked up within a commercially reasonable time.
 3. If Customer fails to return the Equipment(s) within the time specified above, Customer is deemed to have renewed the Rental Out Contract on the same terms and conditions.
 4. Compliance with California Air Resources Board (CARB) Idling Regulation (Title 13, California Code of Regulations 124491(d)): Any in-use off-road diesel vehicle may not idle for more than 5 consecutive minutes. Customer is responsible for compliance with CARB off-road diesel engine idling limits and is responsible for any penalties or fines incurred for non-compliance.

This Rental Out Contract consists of both sides of this document. I have had the opportunity to read the terms and conditions on both sides of this Rental Out Contract and have been instructed in the proper use and operation of the Equipment(s) delivered and will ensure that all operators receive this training and the instructions contained in the manufacturer's operation manual, a copy of which has been provided with the Equipment(s), which will be read by each operator. I have been familiarized with the location, purpose, and function of all (a) operating controls, (b) safety devices, and (c) manuals of the specific Equipment(s) rented herein. I have read and understood the instructions provided, and all questions have been answered to my satisfaction.

By signing below, I represent and warrant that I am of legal age, I am vested with the authority and power to sign this Rental Out Contract on behalf of the Customer, and I am authorized to bind the Customer to the terms and conditions set forth in this Rental Out Contract, including the terms and conditions located on the reverse side hereof.

X _____
 CUSTOMER SIGNATURE DATE NAME PRINTED DELIVERED BY DATE

Terms: Payment Due within 10 days of invoice. A finance charge of 2% per month will be added to past due accounts.

Please visit us on the web at www.Ahern.com or you may call our 24 hour service at 800-400-1610.

Attachment 19
 Inv. No. 1415945
 Page 8 of 20

SEND PAYMENTS TO:

AHERN RENTALS
 PO BOX 271390
 LAS VEGAS NV 89127-1390
 TEL: 702-647-8100
 FAX: 702-647-9866



CUSTOMER ASSISTANCE:

CORPUS CHRISTI
 7925 BEARDEN DR
 CORPUS CHRISTI TX 78409-20
 TEL: 361-288-8190
 FAX: 361-288-8191
 MON - FRI 6:00-5:00
 SATURDAY CLOSED
 SUNDAY CLOSED

CYCLE INVOICE

** COPY **

Customer:
 CORE SUPPLIES & MATERIALS
 2166 STATE HIGHWAY 35 BYPASS
 ARANSAS PASS TX 78336-0000

Job Site:
 VOESTAPLINE
 LA QUINTA TERMINAL
 PORTLAND, TX 78374

C#: 832-452-1681 J#: 832-452-1681
 Map page/grid: X/X

Customer #.. 291027
 Invoice #... 16762616-4
 Invoice Date 2/05/17
 Date Out... 10/27/16 12:00 PM
 Billed thru. 2/16/17
 Job Loc..... VOESTAPLINE;LAS QUINTA TERM
 Job #..... VOESTAPLINE
 P.O. #..... NA
 Ordered By.. TRENO/MATT/REX
 Written By.. CYCLE BILL
 Sales Rep... 4901 - MATTHEW E ANDERSON
 Terms..... Net 10 Days

Qty	Equipment	Min	Day	Week	4 Week	Amount
-----	-----------	-----	-----	------	--------	--------

1	TRUCK, WATER, 2000 GAL-CDL REQUIRED EQP#: 75244 Make: FORD Model: F-650 Ser #: 3FRNF65A48V656930 MI OUT: 17245.00 MI IN: TOTAL: 17245.00	265.00	265.00	841.50	2360.00	2360.00
---	--	--------	--------	--------	---------	---------

SALES ITEMS:

Qty	Item number	Unit	Price	Amount
1	160642	EA	7.500	7.50
ENVIRONMENTAL CHARGE				

Core Supplies > Trino 361-728-5478
 Customer Call Off/Special Rates
 Taxable Sub-total: 2650.70
 Rental-total: 2367.50
 Damage waiver: 283.20
 (8.25%) Tax: 218.68
 Total: 2869.38
 BILLED FOR FOUR WEEKS 1/19/17 THRU 2/16/17

IF THE EQUIPMENT(S) DOES NOT WORK PROPERLY, IMMEDIATELY DISCONTINUE USE AND NOTIFY CUSTOMER ASSISTANCE AT ONCE **MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY** **CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS**

1. Damage Waiver (12% of gross rental charges) will be charged absent proof of insurance (see reverse side of this Rental Out Contract).
 2. Customer must contact Customer Assistance to obtain call off rental number and is responsible for the Equipment(s) until it is picked up within a commercially reasonable time.
 3. If Customer fails to return the Equipment(s) within the time specified above, Customer is deemed to have renewed the Rental Out Contract on the same terms and conditions.
 4. Compliance with California Air Resources Board (CARB) (telling Regulation (Title 13, California Code of Regulations 12449(d)(3)). Any in-use off-road diesel vehicle may not idle for more than 5 consecutive minutes. Customer is responsible for compliance with CARB off-road diesel engine idling times and is responsible for any penalties or fines incurred for non-compliance.

This Rental Out Contract consists of both sides of this document. I have had the opportunity to read the terms and conditions on both sides of this Rental Out Contract and have been instructed in the proper use and operation of the Equipment(s) delivered and will ensure that all operators receive the training and the instructions contained in the manufacturer's operation manual, a copy of which has been provided with the Equipment(s), which will be read by each operator. I have been familiarized with the location, purpose, and function of all (a) operating controls, (b) safety devices, and (c) manuals of the specific Equipment(s) rented herein. I have read and understood the instructions provided, and all questions have been answered to my satisfaction.

By signing below, I represent and warrant that I am of legal age, I am vested with the authority and power to sign this Rental Out Contract on behalf of the Customer, and I am authorized to bind the Customer to the terms and conditions set forth in this Rental Out Contract, including the terms and conditions located on the reverse side hereof.

X _____
 CUSTOMER SIGNATURE DATE NAME PRINTED DELIVERED BY DATE

Terms: Payment Due within 10 days of invoice. A finance charge of 2% per month will be added to past due accounts.

Please visit us on the web at www.Ahern.com or you may call our 24 hour service at 800-400-1610.

Attachment 19
 Inv. No. 1415945
 Page 9 of 20

SEND PAYMENTS TO:

AHERN RENTALS
 PO BOX 271390
 LAS VEGAS NV 89127-1390
 TEL: 702-647-8100
 FAX: 702-647-9866



CUSTOMER ASSISTANCE:

CORPUS CHRISTI
 7925 BEARDEN DR
 CORPUS CHRISTI TX 78409-20
 TEL: 361-288-8190
 FAX: 361-288-8191
 MON - FRI 6:00-5:00
 SATURDAY CLOSED
 SUNDAY CLOSED

CYCLE INVOICE
 ** COPY **

Customer:
 CORE SUPPLIES & MATERIALS
 2166 STATE HIGHWAY 35 BYPASS
 ARANSAS PASS TX 78336-0000

Job Site:
 VOESTAPLINE
 LA QUINTA TERMINAL
 PORTLAND, TX 78374

C#: 832-452-1681 J#: 832-452-1681
 Map page/grid: X/X

Customer #.. 291027
 Invoice #... 16762616-3
 Invoice Date 1/08/17
 Date Out.... 10/27/16 12:00 PM
 Billed thru. 1/19/17
 Job Loc..... VOESTAPLINE;LAS QUINTA TERM
 Job #..... VOESTAPLINE
 P.O. #..... NA
 Ordered By.. TRENO/MATT/REX
 Written By.. CYCLE BILL
 Sales Rep... 4901 - MATTHEW E ANDERSON
 Terms..... Net 10 Days

Qty	Equipment	Min	Day	Week	4 Week	Amount
-----	-----------	-----	-----	------	--------	--------

1	TRUCK,WATER,2000 GAL-CDL REQUIRED EQP#: 75244 Make: FORD Model: F-650 Ser #: 3FRNF65A48V656930 MI OUT: 17245.00 MI IN: TOTAL: 17245.00	265.00	265.00	841.50	2360.00	2360.00
---	--	--------	--------	--------	---------	---------

SALES ITEMS:

Qty	Item number	Unit	Price	Amount
1	160642 ENVIRONMENTAL CHARGE	EA	7.500	7.50

Core Supplies > Trino 361-728-5478
 Customer Call Off/Special Rates
 Taxable Sub-total: 2650.70
 Rental-total: 2367.50
 Damage waiver: 283.20
 (8.25%) Tax: 218.68
 Total: 2869.38

BILLED FOR FOUR WEEKS 12/22/16 THRU 1/19/17

IF THE EQUIPMENT(S) DOES NOT WORK PROPERLY, IMMEDIATELY DISCONTINUE USE AND NOTIFY CUSTOMER ASSISTANCE AT ONCE **MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY** **CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS**

1. Damage Waiver (12% of gross rental charges) will be charged absent proof of insurance (see reverse side of this Rental Out Contract).
 2. Customer must contact Customer Assistance to obtain call off rental number and is responsible for the Equipment(s) until it is picked up within a commercially reasonable time.
 3. If Customer fails to return the Equipment(s) within the time specified above, Customer is deemed to have renewed the Rental Out Contract on the same terms and conditions.
 4. Compliance with California Air Resources Board (CARB) Idling Regulation (Title 13, California Code of Regulations 12449(d)(3): Any in-use off-road diesel vehicle may not idle for more than 5 consecutive minutes. Customer is responsible for compliance with CARB off-road diesel engine idling limits and is responsible for any penalties or fines incurred for non-compliance.

This Rental Out Contract consists of both sides of this document. I have had the opportunity to read the terms and conditions on both sides of this Rental Out Contract and have been instructed in the proper use and operation of the Equipment(s) delivered and will ensure that all operators receive this training and the instructions contained in the manufacturer's operation manual, a copy of which has been provided with the Equipment(s), which will be read by each operator. I have been familiarized with the location, purpose, and function of all (a) operating controls, (b) safety devices, and (c) manuals of the specific Equipment(s) rented herein. I have read and understood the instructions provided, and all questions have been answered to my satisfaction.

By signing below, I represent and warrant that I am of legal age, I am vested with the authority and power to sign this Rental Out Contract on behalf of the Customer, and I am authorized to bind the Customer to the terms and conditions set forth in this Rental Out Contract, including the terms and conditions located on the reverse side hereof.

X _____ DATE _____ NAME PRINTED _____ DELIVERED BY _____ DATE _____
 CUSTOMER SIGNATURE

Terms: Payment Due within 10 days of invoice. A finance charge of 2% per month will be added to past due accounts.

Please visit us on the web at www.Ahern.com or you may call our 24 hour service at 800-400-1610.

SEND PAYMENTS TO:

AHERN RENTALS
 PO BOX 271390
 LAS VEGAS NV 89127-1390
 TEL: 702-647-8100
 FAX: 702-647-9866



CUSTOMER ASSISTANCE:

CORPUS CHRISTI
 7925 BEARDEN DR
 CORPUS CHRISTI TX 78409-20
 TEL: 361-288-8190
 FAX: 361-288-8191
 MON - FRI 6:00-5:00
 SATURDAY CLOSED
 SUNDAY CLOSED

CYCLE INVOICE

** COPY **

Customer:

CORE SUPPLIES & MATERIALS
 2166 STATE HIGHWAY 35 BYPASS
 ARANSAS PASS TX 78336-0000

Customer #.. 291027
 Invoice #... 16762616-2
 Invoice Date 12/11/16
 Date Out.... 10/27/16 12:00 PM
 Billed thru. 12/22/16
 Job Loc..... VOESTAPLINE;LAS QUINTA TERM
 Job #..... VOESTAPLINE
 P.O. #..... NA
 Ordered By.. TRENO/MATT/REX
 Written By.. CYCLE BILL
 Sales Rep... 4901 - MATTHEW E ANDERSON
 Terms..... Net 10 Days

Job Site:

VOESTAPLINE
 LA QUINTA TERMINAL
 PORTLAND, TX 78374
 C#: 832-452-1681 J#: 832-452-1681
 Map page/grid: X/X

Qty	Equipment	Min	Day	Week	4 Week	Amount
-----	-----------	-----	-----	------	--------	--------

1	TRUCK,WATER,2000 GAL-CDL REQUIRED EQP#: 75244 Make: FORD Model: F-650 Ser #: 3FRNF65A48V656930 MI OUT: 17245.00 MI IN: TOTAL: 17245.00	265.00	265.00	841.50	2360.00	2360.00
---	--	--------	--------	--------	---------	---------

SALES ITEMS:

Qty	Item number	Unit	Price	Amount
1	160642 ENVIRONMENTAL CHARGE	EA	7.500	7.50

Core Supplies > Trino 361-728-5478
 Customer Call Off/Special Rates
 Rental-total: 2367.50
 Damage waiver: 283.20
 Taxable Sub-total: 2650.70
 (8.25%) Tax: 218.68
 Total: 2869.38
 BILLED FOR FOUR WEEKS 11/24/16 THRU 12/22/16

IF THE EQUIPMENT(S) DOES NOT WORK PROPERLY, IMMEDIATELY DISCONTINUE USE AND NOTIFY CUSTOMER ASSISTANCE AT ONCE **MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY** **CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS**

1 Damage Waiver (12% of gross rental charges) will be charged absent proof of insurance (see reverse side of this Rental Out Contract).
 2 Customer must contact Customer Assistance to obtain call off rental number and is responsible for the Equipment(s) until it is picked up within a commercially reasonable time.
 3 If Customer fails to return the Equipment(s) within the time specified above, Customer is deemed to have renewed the Rental Out Contract on the same terms and conditions.
 4 Compliance with California Air Resources Board (CARB) testing Regulation (Title 13, California Code of Regulations 42449.0)(3): Any in-use off-road diesel vehicle may not idle for more than 5 consecutive minutes. Customer is responsible for compliance with CARB off-road diesel engine idling limits and is responsible for any penalties or fines incurred for non-compliance.
 This Rental Out Contract consists of both sides of this document. I have had the opportunity to read the terms and conditions on both sides of this Rental Out Contract and have been instructed in the proper use and operation of the Equipment(s) delivered and will ensure that all operators receive this training and the instructions contained in the manufacturer's operation manual, a copy of which has been provided with the Equipment(s), which will be read by each operator. I have been familiarized with the location, purpose, and function of all (a) operating controls, (b) safety devices, and (c) manuals of the specific Equipment(s) rented herein. I have read and understand the instructions provided, and all questions have been answered to my satisfaction.
 By signing below, I represent and warrant that I am of legal age, I am vested with the authority and power to sign this Rental Out Contract on behalf of the Customer, and I am authorized to bind the Customer to the terms and conditions set forth in this Rental Out Contract, including the terms and conditions located on the reverse side hereof.

X CUSTOMER SIGNATURE _____ DATE _____ NAME PRINTED _____ DELIVERED BY _____ DATE _____

Terms: Payment Due within 10 days of invoice. A finance charge of 2% per month will be added to past due accounts.

Please visit us on the web at www.Ahern.com or you may call our 24 hour service at 800-400-1610.

SEND PAYMENTS TO:

AHERN RENTALS
 PO BOX 271390
 LAS VEGAS NV 89127-1390
 TEL: 702-647-8100
 FAX: 702-647-9866



CUSTOMER ASSISTANCE:

CORPUS CHRISTI
 7925 BEARDEN DR
 CORPUS CHRISTI TX 78409-20
 TEL: 361-288-8190
 FAX: 361-288-8191
 MON - FRI 6:00-5:00
 SATURDAY CLOSED
 SUNDAY CLOSED

CYCLE INVOICE
 ** COPY **

Customer:
 CORE SUPPLIES & MATERIALS
 2166 STATE HIGHWAY 35 BYPASS
 ARANSAS PASS TX 78336-0000

Job Site:
 VOESTAPLINE
 LA QUINTA TERMINAL
 PORTLAND, TX 78374

C#: 832-452-1681 J#: 832-452-1681
 Map page/grid: X/X

Customer #.. 291027
 Invoice #... 16762616-1
 Invoice Date 11/13/16
 Date Out.... 10/27/16 12:00 PM
 Billed thru. 11/24/16
 Job Loc..... VOESTAPLINE;LAS QUINTA TERM
 Job #..... VOESTAPLINE
 P.O. #..... NA
 Ordered By.. TRENO/MATT/REX
 Written By.. CYCLE BILL
 Sales Rep... 4901 - MATTHEW E ANDERSON
 Terms..... Net 10 Days

Qty	Equipment	Min	Day	Week	4 Week	Amount
-----	-----------	-----	-----	------	--------	--------

1	TRUCK,WATER,2000 GAL-CDL REQUIRED	265.00	265.00	841.50	2360.00	2360.00
EQP#: 75244 Make: FORD Model: F-650 Ser #: 3FRNF65A48V656930						
MI OUT: 17245.00 MI IN: TOTAL: 17245.00						

SALES ITEMS:

Qty	Item number	Unit	Price	
1	160642	EA	7.500	7.50
ENVIRONMENTAL CHARGE				

Core Supplies > Trino 361-728-5478
 Customer Call Off/Special Rates
 Taxable Sub-total: 2650.70
 Rental-total: 2367.50
 Damage waiver: 283.20
 (8.25%) Tax: 218.68
 Total: 2869.38

BILLED FOR FOUR WEEKS 10/27/16 THRU 11/24/16

IF THE EQUIPMENT(S) DOES NOT WORK PROPERLY, IMMEDIATELY DISCONTINUE USE AND NOTIFY CUSTOMER ASSISTANCE AT ONCE **MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY** **CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS**

1. Damage Waiver (12% of gross rental charges) will be charged absent proof of insurance (see reverse side of this Rental Out Contract).
 2. Customer must contact Customer Assistance to obtain call off rental number and is responsible for the Equipment(s) until it is picked up within a commercially reasonable time.
 3. If Customer fails to return the Equipment(s) within the time specified above, Customer is deemed to have renewed the Rental Out Contract on the same terms and conditions.
 4. Compliance with California Air Resources Board (CARB) tailing regulation (Title 13, California Code of Regulations §2419(d)(3): Any in-use off-road diesel vehicle may not idle for more than 5 consecutive minutes. Customer is responsible for compliance with CARB off road diesel engine idling limits and is responsible for any penalties or fines incurred for non-compliance.

This Rental Out Contract consists of both sides of this document. I have had the opportunity to read the terms and conditions on both sides of this Rental Out Contract and have been instructed in the proper use and operation of the Equipment(s) delivered and will ensure that all operators receive this training and the instructions contained in the manufacturer's operation manual, a copy of which has been provided with the Equipment(s), which will be read by each operator. I have been familiarized with the location, purpose, and function of all (a) operating controls, (b) safety devices, and (c) manuals of the specific Equipment(s) rented herein. I have read and understood the instructions provided, and all questions have been answered to my satisfaction.

By signing below, I represent and warrant that I am of legal age, I am vested with the authority and power to sign this Rental Out Contract on behalf of the Customer, and I am authorized to bind the Customer to the terms and conditions set forth in this Rental Out Contract, including the terms and conditions located on the reverse side hereof.

X _____ DATE _____ NAME PRINTED _____ DELIVERED BY _____ DATE _____

Terms: Payment Due within 10 days of invoice. A finance charge of 2% per month will be added to past due accounts.

Please visit us on the web at www.Ahern.com or you may call our 24 hour service at 800-400-1610.

Attachment 19
 Inv. No. 1415945
 Page 12 of 20

SEND PAYMENTS TO:

AHERN RENTALS
 PO BOX 271390
 LAS VEGAS NV 89127-1390
 TEL: 702-647-8100
 FAX: 702-647-9866



CUSTOMER ASSISTANCE:

CORPUS CHRISTI
 7925 BEARDEN DR
 CORPUS CHRISTI TX 78409-20
 TEL: 361-288-8190
 FAX: 361-288-8191
 MON - FRI 6:00-5:00
 SATURDAY CLOSED
 SUNDAY CLOSED

RENTAL INVOICE

** COPY **

Customer:

CORE SUPPLIES & MATERIALS
 2166 STATE HIGHWAY 35 BYPASS
 ARANSAS PASS TX 78336-0000

Customer #.. 291027
 Invoice #... 16351391-3
 Invoice Date 10/03/16
 Date Out.... 7/20/16 8:00 AM
 Date In..... 9/30/16 4:02 PM
 Job Loc..... VOESTALPINE;LAS QUINTA TERM
 Job #..... VOESTALPINE
 P.O. #..... N/A
 Ordered By.. MIKE/MATTA/AMC
 Written By.. REXDA
 Sales Rep... 4901 - MATTHEW E ANDERSON
 Terms..... Net 10 Days

Job Site:

VOESTALPINE
 LA QUINTA TERMINAL RD
 PORTLAND, TX 78374

C#: 832-452-1681 J#: 832-452-1681
 Map page/grid: X/X

Qty	Equipment	Min	Day	Week	4 Week	Amount
-----	-----------	-----	-----	------	--------	--------

1	TRUCK, WATER, 2000 GAL-CDL REQUIRED EQP#: 75244 Make: FORD Model: F-650 Ser #: 3FRNF65A48V656930 MI OUT: 16955.00 MI IN: 17163.00 TOTAL: 208.00	265.00	265.00	841.50	2360.00	2360.00
---	---	--------	--------	--------	---------	---------

SALES ITEMS:

Qty	Item number	Unit	Price	Amount
1	160642 ENVIRONMENTAL CHARGE	EA	7.500	7.50

MIKE 361-385-6191

Rental-total;	2367.50
Damage waiver:	283.20
(8.25%) Tax:	218.68
Total:	2869.38

FINAL BILL: 9/14/16 08:00 AM THRU 9/30/16 04:02 PM.

IF THE EQUIPMENT(S) DOES NOT WORK PROPERLY, IMMEDIATELY DISCONTINUE USE AND NOTIFY CUSTOMER ASSISTANCE AT ONCE

MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY

CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS

1. Damage Waiver (12% of gross rental charges) will be charged absent proof of insurance (see reverse side of this Rental Out Contract).
 2. Customer must contact Customer Assistance to obtain call off rental number and is responsible for the Equipment(s) until it is picked up within a commercially reasonable time.
 3. If Customer fails to return the Equipment(s) within the time specified above, Customer is deemed to have renewed the Rental Out Contract on the same terms and conditions.
 4. Compliance with California Air Resources Board (CARB) Idling Regulation (Title 13, California Code of Regulations 12449.0113). Any in-use off-road diesel vehicle may not idle for more than 5 consecutive minutes. Customer is responsible for compliance with CARB off-road diesel engine idling limits and is responsible for any penalties or fines incurred for non-compliance.
 This Rental Out Contract consists of both sides of this document. I have had the opportunity to read the terms and conditions on both sides of this Rental Out Contract and have been instructed in the proper use and operation of the Equipment(s) delivered and will ensure that all operators receive this training and the instructions contained in the manufacturer's operation manual, a copy of which has been provided with the Equipment(s), which will be read by each operator. I have been familiarized with the location, purpose, and function of all (a) operating controls, (b) safety devices, and (c) manuals of the specific Equipment(s) rented herein. I have read and understood the instructions provided and all questions have been answered to my satisfaction.
 By signing below, I represent and warrant that I am of legal age, I am vested with the authority and power to sign this Rental Out Contract on behalf of the Customer, and I am authorized to bind the Customer to the terms and conditions set forth in this Rental Out Contract, including the terms and conditions located on the reverse side hereof.

X _____
 CUSTOMER SIGNATURE DATE NAME PRINTED DELIVERED BY DATE

Terms: Payment Due within 10 days of invoice. A finance charge of 2% per month will be added to past due accounts.

Please visit us on the web at www.Ahern.com or you may call our 24 hour service at 800-400-1610.

SEND PAYMENTS TO:

AHERN RENTALS
PO BOX 271390
LAS VEGAS NV 89127-1390
TEL: 702-647-8100
FAX: 702-647-9866



CUSTOMER ASSISTANCE:

CORPUS CHRISTI
7925 BEARDEN DR
CORPUS CHRISTI TX 78409-20
TEL: 361-288-8190
FAX: 361-288-8191
MON - FRI 6:00-5:00
SATURDAY CLOSED
SUNDAY CLOSED

CYCLE INVOICE
** COPY **

Customer:
CORE SUPPLIES & MATERIALS
2166 STATE HIGHWAY 35 BYPASS
ARANSAS PASS TX 78336-0000

Job Site:
VOESTALPINE
LA QUINTA TERMINAL RD
PORTLAND, TX 78374

C#: 832-452-1681 J#: 832-452-1681
Map page/grid: X/X

Customer #.. 291027
Invoice #... 16351391-2
Invoice Date 9/03/16
Date Out.... 7/20/16 8:00 AM
Billed thru. 9/14/16
Job Loc..... VOESTALPINE;LAS QUINTA TERM
Job #..... VOESTALPINE
P.O. #..... N/A
Ordered By.. MIKE/MATTA/AMC
Written By.. CYCLE BILL
Sales Rep... 4901 - MATTHEW E ANDERSON
Terms..... Net 10 Days

Table header with columns: Qty, Equipment, Min, Day, Week, 4 Week, Amount

Table row 1: 1 TRUCK, WATER, 2000 GAL-CDL REQUIRED 265.00 265.00 841.50 2360.00 2360.00
EQP#: 75244 Make: FORD Model: F-650 Ser #: 3FRNF65A48V656930
MI OUT: 16955.00 MI IN: TOTAL: 16955.00

SALES ITEMS:

Table with 4 columns: Qty, Item number, Unit, Price, Amount
1 160642 ENVIRONMENTAL CHARGE EA 7.500 7.50

MIKE 361-385-6191

Rental-total: 2367.50
Damage waiver: 283.20
(8.25%) Tax: 218.68
Total: 2869.38

BILLED FOR FOUR WEEKS 8/17/16 THRU 9/14/16

IF THE EQUIPMENT(S) DOES NOT WORK PROPERLY, IMMEDIATELY DISCONTINUE USE AND NOTIFY CUSTOMER ASSISTANCE AT ONCE
MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY
CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS

1. Damage Waiver (12% of gross rental charges) will be charged absent proof of insurance (see reverse side of this Rental Out Contract).
2. Customer must contact Customer Assistance to obtain call off rental number and is responsible for the Equipment(s) until it is picked up within a commercially reasonable time.
3. If Customer fails to return the Equipment(s) within the time specified above, Customer is deemed to have renewed the Rental Out Contract on the same terms and conditions.
4. Compliance with California Air Resources Board (CARB) lighting Regulation (Title 13, California Code of Regulations 12449(d)(3): Any in-use off-road diesel vehicle may not idle for more than 5 consecutive minutes. Customer is responsible for compliance with CARB off-road diesel engine idling limits and is responsible for any penalties or fines incurred for non-compliance.
This Rental Out Contract consists of both sides of this document. I have had the opportunity to read the terms and conditions on both sides of this Rental Out Contract and have been instructed in the proper use and operation of the Equipment(s) delivered and will ensure that all operators receive this training and the instructions contained in the manufacturer's operation manual, a copy of which has been provided with the Equipment(s), which will be read by each operator. I have been familiarized with the location, purpose, and function of all (a) operating controls, (b) safety devices, and (c) manuals of the specific Equipment(s) rented herein. I have read and understood the instructions provided, and all questions have been answered to my satisfaction.
By signing below, I represent and warrant that I am of legal age, I am vested with the authority and power to sign this Rental Out Contract on behalf of the Customer, and I am authorized to bind the Customer to the terms and conditions set forth in this Rental Out Contract, including the terms and conditions located on the reverse side hereof.

X CUSTOMER SIGNATURE DATE NAME PRINTED DELIVERED BY DATE

Terms: Payment Due within 10 days of invoice. A finance charge of 2% per month will be added to past due accounts.

Please visit us on the web at www.Ahern.com or you may call our 24 hour service at 800-400-1610.

Attachment 19
Inv. No. 1415945
Page 14 of 20

SEND PAYMENTS TO:

AHERN RENTALS
 PO BOX 271390
 LAS VEGAS NV 89127-1390
 TEL: 702-647-8100
 FAX: 702-647-9866



CUSTOMER ASSISTANCE:

CORPUS CHRISTI
 7925 BEARDEN DR
 CORPUS CHRISTI TX 78409-20
 TEL: 361-288-8190
 FAX: 361-288-8191
 MON - FRI 6:00-5:00
 SATURDAY CLOSED
 SUNDAY CLOSED

CYCLE INVOICE

** COPY **

Customer:

CORE SUPPLIES & MATERIALS
 2166 STATE HIGHWAY 35 BYPASS
 ARANSAS PASS TX 78336-0000

Customer #.. 291027
 Invoice #... 16351391-1
 Invoice Date 8/06/16
 Date Out.... 7/20/16 8:00 AM
 Billed thru. 8/17/16
 Job Loc..... VOESTALPINE;LAS QUINTA TERM
 Job #..... VOESTALPINE
 P.O. #..... N/A
 Ordered By.. MIKE/MATTA/AMC
 Written By.. CYCLE BILL
 Sales Rep... 4901 - MATTHEW E ANDERSON
 Terms..... Net 10 Days

Job Site:

VOESTALPINE
 LA QUINTA TERMINAL RD
 PORTLAND, TX 78374

C#: 832-452-1681 J#: 832-452-1681
 Map page/grid: X/X

Qty	Equipment	Min	Day	Week	4 Week	Amount
-----	-----------	-----	-----	------	--------	--------

1	TRUCK, WATER, 2000 GAL-CDL REQUIRED EQP#: 75244 Make: FORD Model: F-650 Ser #: 3FRNF65A48V656930 MI OUT: 16955.00 MI IN: TOTAL: 16955.00	265.00	265.00	841.50	2360.00	2360.00
---	--	--------	--------	--------	---------	---------

SALES ITEMS:

Qty	Item number	Unit	Price	Amount
1	160642 ENVIRONMENTAL CHARGE	EA	7.500	7.50

MIKE 361-385-6191

Rental-total: 2367.50
 Damage waiver: 283.20
 (8.25%) Tax: 218.68
 Total: 2869.38

BILLED FOR FOUR WEEKS 7/20/16 THRU 8/17/16

IF THE EQUIPMENT(S) DOES NOT WORK PROPERLY, IMMEDIATELY DISCONTINUE USE AND NOTIFY CUSTOMER ASSISTANCE AT ONCE **MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY** **CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS**

1. Damage Waiver (12% of gross rental charges) will be charged absent proof of insurance (see reverse side of this Rental Out Contract).
 2. Customer must contact Customer Assistance to obtain call off rental number and is responsible for the Equipment(s) until it is picked up within a commercially reasonable time.
 3. If Customer fails to return the Equipment(s) within the time specified above, Customer is deemed to have renewed the Rental Out Contract on the same terms and conditions.
 4. Compliance with California Air Resources Board (CARB) Idling Regulation (Title 13, California Code of Regulations §2449(d)(3): Any in-use off-road diesel vehicle may not idle for more than 5 consecutive minutes. Customer is responsible for compliance with CARB off-road diesel engine idling limits and is responsible for any penalties or fines incurred for non-compliance.
 This Rental Out Contract consists of both sides of this document. I have had the opportunity to read the terms and conditions on both sides of this Rental Out Contract and have been instructed in the proper use and operation of the Equipment(s) delivered and will ensure that all operators receive this training and the instructions contained in the manufacturer's operation manual, a copy of which has been provided with the Equipment(s), which will be read by each operator. I have been familiarized with the location, purpose, and function of all (a) operating controls, (b) safety devices, and (c) manuals of the specific Equipment(s) rented herein. I have read and understood the instructions provided, and all questions have been answered to my satisfaction.
 By signing below, I represent and warrant that I am of legal age, I am vested with the authority and power to sign this Rental Out Contract on behalf of the Customer, and I am authorized to bind the Customer to the terms and conditions set forth in this Rental Out Contract, including the terms and conditions located on the reverse side hereof.

X CUSTOMER SIGNATURE _____ DATE _____ NAME PRINTED _____ DELIVERED BY _____ DATE _____

Terms: Payment Due within 10 days of invoice. A finance charge of 2% per month will be added to past due accounts.

Please visit us on the web at www.Ahern.com or you may call our 24 hour service at 800-400-1610.

June 23, 2017

Susan,

Please see below for voestalpine's response to the June, 2017 additional information request.

- (1) *Provide documentation to verify if EPN 36 (Remet/Fines Storage) is stored in a bunker.*

EPN 36 is not stored in a bunker.

- (2) *Is the water truck usage for the road dust and/or the outside storage pile dust?*

Water trucks are used to control dust from roads. Water trucks are also being used to manage outside storage piles with both water and chemical dust suppression.

- (3) *In the recent PBR application for 30 TAC 106.261 (Registration No. 147082), EPNs 41 through 61 include a metric ton amount. Is that the actual current storage amount or is that the maximum planned storage amount at any point in the future? If it is not the current stored amount, please provide the current amount for each EPN.*

See below for estimated amounts of material stored at EPNs 41-62.

Unit Description	EPN	Estimated Current Stored (mt)
Remet	41	14500
HBI Chips/Fines	42	6500
Daghouse Fines	43	35
Grade C HBI	44	30000
Iron Ore Pellets RH-20	45	10300
Iron Ore Pellets LKAB BFP	46	95000
Iron Ore Fines	47	12500
Iron Ore Fines	48	12500
Iron Ore Fines	49	4500
HBI Chips (+6.3mm)	50	5000
HBI	51	1000
HDRl Clusters	52	13500
HBI Startup (Mix HBI Chips/Remet)	53	13500
HBI Warmup (Mix HBI/DRI)	54	13500
Grade A HBI	55	10000
Iron Ore Fines/Pellets	56	2500
HBI Chips (-6.3 mm)	57	5000
FRP Cold Briquettes/Fines	58	600
Iron Ore Coated Pellets RH-20	59	7000
Iron Ore Coated Pellets RH-20	60	11000
HBI Sludge	61	5500
Iron Ore Sludge	62	5500

voestalpine

ONE STEP AHEAD.

- (4) Provide the lb/hr and TPY emissions for all of the outside storage piles (EPNs 41 through 61) from February 17, 2017 (start of outside storage) through June 6, 2017.

See below for estimated emissions from EPNs 41-62.

Emission Summary								
EPN	FIN	Unit Description (as listed on the Plot Plan)	TSP (as Iron Oxide Dust)		PM10 (as Iron Oxide Dust)		PM2.5 (as Iron Oxide Dust)	
			(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)
41	41	Remet 35,000 mt Total	0.29	0.14	0.13	0.04	0.04	0.01
42	42	5,000 mt HBI Chips/Fines Total	0.12	0.13	0.05	0.04	0.02	4.80E-03
43	43	5,000 mt Baghouse Fines Total	0.17	0.85	0.06	0.23	0.01	0.02
44	44	75,000 mt Grade C HBI Total	0.62	0.28	0.27	0.07	0.08	0.01
45	45	60,000 mt Iron Ore Pellets RH 20 Total	0.54	0.17	0.24	0.04	0.07	0.01
46	46	100,000 mt Iron Ore Pellets LKAB BFP Total	0.26	0.34	0.11	0.12	0.03	0.03
47	47	30,000 mt Iron Ore Fines Total	0.19	0.94	0.06	0.25	0.01	0.03
48	48	30,000 mt Iron Ore Fines Total	0.19	0.94	0.06	0.25	0.01	0.03
49	49	15,000 mt Iron Ore Fines Total	0.42	0.88	0.17	0.24	0.05	0.02
50	50	5,000 mt HBI Chips (+6.3mm) Total	0.22	0.89	0.08	0.24	0.02	0.02
51	51	5,000 mt HBI Total	0.12	0.12	0.05	0.03	0.02	4.19E-03
52	52	5,000 mt HDRI Clusters Total	0.13	0.19	0.05	0.05	0.02	0.01
53	53	5,000 mt HBI Startup (Mix HBI Chips/Remet) Total	0.13	0.19	0.05	0.05	0.02	0.01
54	54	5,000 mt HBI Warm Up (Mix HB/DRI) Total	0.13	0.19	0.05	0.05	0.02	0.01
55	55	75,000 mt Grade A HBI Total	0.60	0.18	0.27	0.05	0.08	0.01
56	56	15,000 mt Iron Ore Fines/Pellets Total	0.42	0.87	0.17	0.23	0.05	0.02
57	57	5,000 mt HBI Chips (-6.3mm) Total	0.22	0.89	0.08	0.24	0.02	0.02
58	58	5,000 mt FRP Cold Briquettes/Fines Total	0.07	0.12	0.03	0.03	0.01	3.22E-03
59	59	20,000 mt Iron Ore Coated Pellets RH 20 Total	0.22	0.15	0.10	0.04	0.03	0.01
60	60	20,000 mt Iron Ore Coated Pellets RH 20 Total	0.23	0.18	0.10	0.05	0.03	0.01
61	61	5,000 mt HBI Sludge Total	0.14	0.89	0.05	0.24	0.01	0.03
62	62	5,000 mt Iron Ore Sludge Total	0.14	0.89	0.05	0.24	0.01	0.03
Total Emissions			5.57	10.43	2.30	2.80	0.65	0.34



Shannon L. Parham
Environmental Manager

voestalpine

ONE STEP AHEAD.

Susan Hoelscher

From:
Sent: Friday, June 23, 2017 4:35 PM
To: Susan Hoelscher
Subject: RE: Information Request
Attachments: voestalpine Texas LLC 06232017 Response.pdf

Susan,

Please see attached for voestalpine's response to the 6/16/2017 additional information request.

Thank you,

Shannon

Shannon L. Parham
Environmental Manager

voestalpine Texas LLC
2800 Kay Bailey Hutchison Road
Portland, Texas 78374, United States
M. +1 361 229 2865
T. +1 361 704 9000
F. +1 361 704 9090

www.voestalpine.com/texas

voestalpine - One step ahead.

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

From: Susan Hoelscher [mailto:Susan.Hoelscher@tceq.texas.gov]
Sent: Friday, June 16, 2017 4:06 PM
To: Parham Shannon
Cc: Hernandez Dominick; Kelly Ruble
Subject: RE: Information Request

Good Afternoon Shannon,

Thank you for providing the additional information. Upon review, we have some additional questions.

- (1) Provide documentation to verify if EPN 36 (Remet/Fines Storage) is stored in a bunker.
- (2) Is the water truck usage for the road dust and/or the outside storage pile dust?
- (3) In the recent PBR application for 30 TAC 106.261 (Registration No. 147082), EPNs 41 through 61 include a metric ton amount. Is that the actual current storage amount or is that the maximum planned storage amount at any point in the future? If it is not the current stored amount, please provide the current amount for each EPN.
- (4) Provide the lb/hr and TPY emissions for all of the outside storage piles (EPNs 41 through 61) from February 17, 2017 (start of outside storage) through June 6, 2017.

Please provide this information by Wednesday, June 21, 2017, or sooner if possible. Let us know if you have any questions.

Thank you,

Susan Hoelscher

Air Investigator

TCEQ Region 14-Corpus Christi

(P) 361-825-3118 (F) 361-825-3101

susan.hoelscher@tceq.texas.gov

From: [mailto:]
Sent: Wednesday, June 14, 2017 2:49 PM
To: Susan Hoelscher <Susan.Hoelscher@tceq.texas.gov>
Cc:
Subject: RE: Information Request

Susan,

Please see attached in response to the May 31, 2017 additional information request.

Best Regards,
Shannon

Shannon L. Parham
Environmental Manager

voestalpine Texas LLC
2800 Kay Bailey Hutchison Road
Portland, Texas 78374, United States
M. +1 361 229 2865
T. +1 361 704 9000
F. +1 361 704 9090

www.voestalpine.com/texas

voestalpine - One step ahead.

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

From: Susan Hoelscher [mailto:Susan.Hoelscher@tceq.texas.gov]
Sent: Wednesday, May 31, 2017 3:25 PM
To: Parham Shannon
Cc: ; Kelly Ruble; Sonny Lopez
Subject: Information Request

2

Attachment 19
Inv. No. 1415945
Page 19 of 20

Good Afternoon Shannon,

I would like to request some additional information regarding operations at Voestalpine (see below).

- (1) Provide a brief timeline of activities at Voestalpine from start of operations to date including all MSS activities.
- (2) Provide documentation of fugitive suppressant usage for the storage piles and associated operations from start of operations to date.
- (3) Provide documentation of the quarterly visible emissions observations performed on fugitive sources since the start of operations (NSR Permit No. 108113 Special Condition 7). If visible emissions were observed during the quarterly observations, provide the Method 22 evaluation.
- (4) According to NSR Permit No. 108113 Special Condition 17, iron ore pellets shall be stored in enclosed storage. During sampling conducted at Voestalpine on May 24, 2017, it was documented that some iron ore pellets are stored outside. Please provide documentation indicating when outside storage of iron ore pellets began.

Please provide this information to me by next week Wednesday, June 7, 2017, or sooner, if possible. Feel free to contact me or Kelly if you have any questions or concerns.

Thank you,

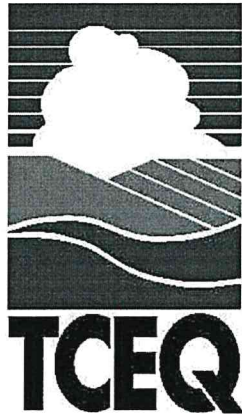
Susan Hoelscher

Air Investigator

TCEQ Region 14-Corpus Christi

(P) 361-825-3118 (F) 361-825-3101

susan.hoelscher@tceq.texas.gov



ATTACHMENT 20
Exit Interview Documentation

Total Pages: 7

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC


May 16, 2017 – September 8, 2017

TCEQ EXIT INTERVIEW FORM: Potential Violations and/or Records Requested

Regulated Entity/ Site Name	Voestalpine Texas LLC La Quinta Plant		TCEQ Add. ID No. RN No (optional)	CN604261545 RN106597875
Investigation Type	CMP	Contact Made In-House (Y/N)	Purpose of Investigation	Investigation No. 1415945 139 Complaint Incidents
Regulated Entity Contact	Ms. Shannon Parham Mr. Dominck Hernandez		Telephone No.	361-229-2865 Date Contacted 7/20/17
Title	Environmental Manager Process Water Coordinator/Env. Specialist		Email	Emailed 7/20/17

NOTICE: The information provided in this Note is intended to provide clarity to issues that have arisen to the date of this Note during the investigation process between the agency and the company and does not represent agency findings related to violations. Any potential or alleged violations discovered after the date of this Note will be communicated by telephone to the regulated entity representative prior to the issuance of a notice of violation or enforcement. Conclusions drawn from this investigation, including additional violations or potential violations discovered (if any) during the course of this investigation, will be documented in this investigation's final report.

Issue		For Records Request, identify the necessary records, the company contact and date due to the agency. For Alleged and Potential Violation issues, include the rule in question with the clearly described potential problem. Other type of issues: fully describe.	
No.	Type	Rule Citation (if known)	Description of Issue
1	AV	30 Texas Administrative Code (TAC) §101.4; 5C-Texas Health & Safety Code (THSC) §382.085(b)	Failure to prevent nuisance dust conditions. Specifically, Voestalpine Texas LLC failed to prevent a discharge from any source whatsoever one or more air contaminants or combinations thereof, in such concentration and of such duration as are or may tend to be injurious to or to adversely affect human health or welfare, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property. Based upon a response to 139 citizen complaints received on May 16, 2017, May 17, 2017, May 18, 2017, May 19, 2017, May 20, 2017, May 21, 2017, May 22, 2017, May 23, 2017, May 24, 2017, May 25, 2017, May 26, 2017, May 30, 2017, May 31, 2017, June 2, 2017, June 5, 2017, June 7, 2017, June 8, 2017, June 12, 2017, June 13, 2017, June 14, 2017, June 16, 2017, June 19, 2017, June 20, 2017, June 22, 2017, June 27, 2017, June 30, 2017, and July 18, 2017, by the TCEQ's onsite observations, analyses of samples collected, and review of citizen collected evidence, it was determined that deposits of particulate matter (iron ore dust) from the La Quinta Plant were found in sufficient concentration and of such duration to interfere with normal use and enjoyment of property. Nuisance dust conditions were documented on May 16, 2017, May 17, 2017, May 18, 2017, May 19, 2017, May 20, 2017, May 23, 2017, May 24, 2017, May 25, 2017, May 26, 2017, May 30, 2017, June 2, 2017, June 5, 2017, June 8, 2017, June 13, 2017, June 13, 2017, and July 19, 2017.

2	<p>TCEQ New Source Review (NSR) Permit No. 108113/PSD/1344M1 Special Condition (SC) 17;</p> <p>30 TAC §101.20(3) & §116.115(c);</p> <p>5C THSC §382.085(b)</p>	<p>Failure to store iron ore pellets in enclosed storage. Specifically, Voestalpine Texas LLC began storing iron ore pellets outside at the La Quinta Plant on February 17, 2017. The outside storage of iron ore pellets was verified during onsite sampling events on May 17, 2017 and May 24, 2017. As of June 6, 2017, Voestalpine Texas LLC had five outside storage piles containing iron ore pellets, Emission Point Numbers (EPN) 45, 46, 56, 59, 60.</p>
3	<p>30 TAC §116.110(a);</p> <p>5C THSC §382.085(b)</p>	<p>Failure to obtain proper authorization. Specifically, Voestalpine Texas LLC began storing iron ore pellets outside on February 17, 2017 and continued to store additional piles of fines, clusters, chips, sludge, and remet, EPNs 41 through 61, without obtaining authorization.</p>
<p>Note 1: Issue Type Can Be One or More of: AV (Alleged Violation), PV (Potential Violation), O (Other), or RR (Records Request)</p>		
<p>Did the TCEQ document the regulated entity named above operating without proper authorization?</p>		
		<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>Did the investigator advise the regulated entity representative that continued operation is not authorized?</p>		
		<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>Document Acknowledgment. Signature on this document establishes only that the regulated entity (company) representative received a copy of this document and associated continuation pages on the date noted. If contact was made by telephone, document will be faxed to regulated entity; therefore, signature not required.</p>		
Ms. Susan Hoelscher		7/20/2017
Investigator Name (Signed & Printed)		Regulated Entity Representative Name (Signed & Printed)
Date		Date

If you have any questions about any information on this form, please contact your local TCEQ Regional Office. Individual are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, call 512-239-3282.

Susan Hoelscher

From: Susan Hoelscher
Sent: Thursday, July 20, 2017 2:55 PM
To:
Cc: ; Kelly Ruble; Sonny Lopez; Susan Clewis
Subject: Voestalpine Texas LLC-La Quinta Plant Complaint Investigation Exit Interview Form
Attachments: Voestalpine Exit Interview Form Complaint Inv. No. 1415945_July 20, 2017.pdf

Good Afternoon Shannon,

Attached is the Exit Interview Form (EIF) for the Complaint Investigation, Investigation No. 1415945, conducted from May 16, 2017 through July 19, 2017 in response to 139 dust complaints. Three non-compliance items were documented during the course of the investigation. Refer to the attached EIF for details on the alleged violations (AV).

The EIF has a signature field for the regulated entity representative. This field is optional and its purpose is to acknowledge receipt only of the form and not agreement with the issues. Should you sign the form, please fax it to my attention at the Corpus Christi Region 14 Office or send it via email. Otherwise, please reply to this email verifying you have received and reviewed this document. If you have any questions upon review of this document, feel free to contact me.

Also, please note that the investigation is not final and is subject to change upon management review.

Thank you for your attention to this matter.

Sincerely,

Susan Hoelscher

Air Investigator
TCEQ Region 14-Corpus Christi
(P) 361-825-3118 (F) 361-825-3101
susan.hoelscher@tceq.texas.gov

Susan Hoelscher

From: Susan Hoelscher
Sent: Thursday, July 27, 2017 7:58 AM
To:
Cc: Kelly Ruble; Sonny Lopez; Susan Clewis
Subject: RE: Voest Alpine Texas LLC-La Quinta Plant Complaint Investigation Exit Interview Form

Good Morning Shannon,

Below are the responses to the questions sent Thursday, July 20, 2017.

- 1) Were all 139 citizen complaints that the TCEQ received, analytically verified to have deposits of iron ore dust on the property? If not, could the number of complaints and/or households actually verified by the TCEQ to have iron ore material on property be included in the language of the description of issue?

All 139 complaints were verified to have iron ore dust on their property either through tape lift sample analysis and/or by visual/magnetic verification.

- 2) Did TCEQ visually observe nuisance iron ore dust emissions emanating from voest Alpine property lines on any of the inspection dates?

Visible emissions were not noted emanating from Voest Alpine's property during any of the inspection dates; however, a 30 second ambient air tape lift sample was collected on June 23, 2017 downwind of Voest Alpine which indicated metal particles present. In addition, citizen collected evidence has indicated that iron ore dust is continuously impacting citizens' property.

- 3) Is the TCEQ contending that the presence of dust observed on any given date is an indication of a nuisance emission on or about that same date?

The nuisance determination was made based on the date of the investigation at each citizen's (complainant's) location.

Let me know if you have any other questions or need any further clarification.

Thank you,

Susan Hoelscher

Air Investigator
TCEQ Region 14-Corpus Christi
(P) 361-825-3118 (F) 361-825-3101
susan.hoelscher@tceq.texas.gov

From: [mailto:]
Sent: Thursday, July 20, 2017 5:29 PM
To: Susan Hoelscher <Susan.Hoelscher@tceq.texas.gov>
Subject: RE: Voest Alpine Texas LLC-La Quinta Plant Complaint Investigation Exit Interview Form

Susan,

I received and reviewed the exit interview form dated 7/20/17. Would it be possible for you to answer a few questions?

- 1) Were all 139 citizen complaints that the TCEQ received, analytically verified to have deposits of iron ore dust on the property? If not, could the number of complaints and/or households actually verified by the TCEQ to have iron ore material on property be included in the language of the description of issue?
- 2) Did TCEQ visually observe nuisance iron ore dust emissions emanating from voestalpine property lines on any of the inspection dates?
- 3) Is the TCEQ contending that the presence of dust observed on any given date is an indication of a nuisance emission on or about that same date?

Best Regards,

Shannon

Shannon L. Parham
Environmental Manager

voestalpine Texas LLC
2800 Kay Bailey Hutchison Road
Portland, Texas 78374, United States
M. +1 361 229 2865
T. +1 361 704 9000
F. +1 361 704 9090

www.voestalpine.com/texas

voestalpine - One step ahead.

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

From: Susan Hoelscher [<mailto:Susan.Hoelscher@tceq.texas.gov>]
Sent: Thursday, July 20, 2017 2:55 PM
To: Parham Shannon
Cc: Hernandez Dominick; Kelly Ruble; Sonny Lopez; Susan Clewis
Subject: EXT: Voestalpine Texas LLC-La Quinta Plant Complaint Investigation Exit Interview Form

Good Afternoon Shannon,

Attached is the Exit Interview Form (EIF) for the Complaint Investigation, Investigation No. 1415945, conducted from May 16, 2017 through July 19, 2017 in response to 139 dust complaints. Three non-compliance items were documented during the course of the investigation. Refer to the attached EIF for details on the alleged violations (AV).

The EIF has a signature field for the regulated entity representative. This field is optional and its purpose is to acknowledge receipt only of the form and not agreement with the issues. Should you sign the form, please fax it to my attention at the Corpus Christi Region 14 Office or send it via email. Otherwise, please reply to this email verifying you have received and reviewed this document. If you have any questions upon review of this document, feel free to contact me.

Also, please note that the investigation is not final and is subject to change upon management review.

Thank you for your attention to this matter.

Sincerely,

Susan Hoelscher

Air Investigator

TCEQ Region 14-Corpus Christi

(P) 361-825-3118 (F) 361-825-3101

susan.hoelscher@tceq.texas.gov



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Complaint Investigation Exit Interview Meeting
Voestalpine Texas LLC CN604261545
La Quinta Plant RN106597875

Thursday, August 10, 2017 at 2:30 pm

Name	Title	Preferred Means of Contact (e-mail address or phone number)
Susan Hoelscher	Air Section EI	susan.hoelscher@tcqg.texas.gov
Kelly Ruble	Air Section Manager	kelly.ruble@tcqg.texas.gov
Susan Clewis	Regional Director	susan.clewis@tcqg.texas.gov
Sonny Lopez	Air Section Work Lead	sonny.lopez@tcqg.texas.gov
Mekum SCHWARTZ	CTO, Voestalpine	
Shannon L. Parcham	Environmental Manager	
Michael Chernekoff	Jones Walker Outside Counsel	
Lara Pringle	Jones Walker, outside counsel	
Jess Robinson	Staff Attorney	jess.robinson@tcqg.texas.gov



ATTACHMENT 21
Exit Interview Form Response

Total Pages: 122

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 – September 8, 2017

Refer to the
CONFIDENTIAL FILE
for the Exit Interview Form
Response.

This page was
intentionally left blank.



ATTACHMENT 22
Permit by Rule Registration No. 147082 Documentation

Total Pages: 6

Investigation No. 1415945

RN106597875
La Quinta Plant

CN604261545
Voestalpine Texas LLC

May 16, 2017 - September 8, 2017

Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Jon Niermann, *Commissioner*
Richard A. Hyde, P.E., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 06, 2017

MS SHANNON PARHAM
ENVIRONMENTAL MANAGER
VOESTALPINE TEXAS LLC
2800 KAY BAILEY HUTCHINSON RD
PORTLAND TX 78374-7400

Permit by Rule Registration Number: 147082
Voestalpine Texas LLC
La Quinta Plant
Portland, San Patricio County
Regulated Entity Number: RN106597875
Customer Reference Number: CN604261545
Affected Permit: 108113 and PSDTX1344

This is in response to your certification Form PI-7 CERT regarding the La Quinta Plant located at 2800 Kay Bailey Hutchinson Rd, Portland, San Patricio County.

Voestalpine Texas LLC has certified the emissions under Title 30 Texas Administrative Code (TAC) § 106.261. For rule information see: www.tceq.texas.gov/permitting/air/nav/numerical_index.html

As referenced in 30 TAC § 116.116(d)(2), all changes authorized under Chapter 106 to a permitted facility shall be incorporated into the NSR Permit No. 108113 and PSDTX1344 when it is amended or renewed. The company is also reminded that these facilities may be subject to and must comply with other state and federal air quality requirements.

If you need further information or have questions, please contact Ms. Nancy Akintan at (713) 767-3773 or write to the Texas Commission on Environmental Quality (TCEQ), Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under the authority delegated by the Executive Director of the TCEQ.

Sincerely,

A handwritten signature in black ink, appearing to read "Samuel Short", with a long horizontal line extending to the right.

Samuel Short, Manager
Rule Registrations Section
Air Permits Division

cc: Air Section Manager, Region 14 - Corpus Christi

Project Number: 270052

P.O. Box 13087 · Austin, Texas 78711-3087 · 512-239-1000 · tceq.texas.gov

How is our customer service? tceq.texas.gov/customersurvey
printed on recycled paper

Attachment 22
Inv. No. 1415945
Page 1 of 6

Emission Sources - Certified Emission Rates

Registration Number 147082

This table lists the certified emission rates and all sources of air contaminants on the applicant's property covered by this registration. The emission rates shown are those derived from information submitted as part of the registration for PBR.

EPN / Emission Source	PM (TSP)		PM ₁₀		PM _{2.5}		VOC		NOx	
	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy
14 / HBI Pile Screener	2.43	2.43	0.82	0.82	0.06	0.06				
36 / Remet / Fines Storage Screener	0.73	0.14	0.24	0.05	0.02	<0.01				
41 / Remet 35,000 mt	0.12	0.18	0.04	0.04	0.01	<0.01				
42 / 5,000 mt HBI Chips/Fines	0.05	0.07	0.02	0.02	<0.01	<0.01				
43 / 5,000 mt Baghouse Fines	0.12	0.45	0.04	0.12	<0.01	0.04				
44 / 75,000 mt Grade C HBI	0.23	0.31	0.09	0.07	0.03	0.01				
45 / 60,000 mt Iron Ore Pellets RH 20	0.20	0.26	0.08	0.06	0.02	0.01				
46 / 100,000 mt Iron Ore Pellets LKAB BFP	0.14	0.39	0.04	0.09	0.01	0.02				
47 / 30,000 mt Iron Ore Fines	0.15	0.57	0.04	0.15	<0.01	0.02				
48 / 30,000 mt Iron Ore Fines	0.15	0.57	0.04	0.15	<0.01	0.02				
49 / 15,000 mt Iron Ore Fines	0.21	0.50	0.07	0.13	0.02	0.01				
50 / 5,000 mt HBI Chips (+6.3mm)	0.14	0.45	0.04	0.12	<0.01	0.01				
51 / 5,000 mt HBI	0.05	0.07	0.02	0.02	<0.01	<0.01				
52 / 5,000 mt HDRI Clusters	0.05	0.07	0.02	0.02	<0.01	<0.01				
53 / 5,000 mt HBI Startup (Mix HBI Chips/Remet)	0.05	0.07	0.02	0.02	<0.01	<0.01				
54 / 5,000 mt HBI Warm Up (Mix HBI/DR)	0.05	0.07	0.02	0.02	<0.01	<0.01				
55 / 75,000 mt Grade A HBI	0.23	0.31	0.09	0.07	0.03	0.01				
56 / 15,000 mt Iron Ore Fines/Pellets	0.21	0.50	0.07	0.13	0.02	0.01				
57 / 5,000 mt HBI Chips (-6.3mm)	0.14	0.45	0.04	0.12	<0.01	0.01				
58 / 5,000 mt FRP Cold Briquettes/Fines	0.03	0.07	0.01	0.02	<0.01	<0.01				
59 / 20,000 mt Iron Ore Coated Pellets RH 20	0.09	0.12	0.03	0.03	<0.01	<0.01				
60 / 20,000 mt Iron Ore Coated Pellets RH 20	0.09	0.12	0.03	0.03	<0.01	<0.01				
61 / 5,000 mt HBI Sludge	0.11	0.45	0.03	0.12	<0.01	0.01				
62 / 5,000 mt Iron Ore Sludge	0.11	0.45	0.03	0.12	<0.01	0.01				
TOTAL EMISSIONS (TPY):				2.52		0.28				
MAXIMUM OPERATING SCHEDULE:	Hours/Day	Days/Week	Weeks/Year	Hours/Year						
	9.10	2.52	8,760							

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	147082	Company Name:	Voestalpine Texas LLC	APD Reviewer:	Nancy Akintan
Project No.:	270052	Unit Name:	La Quinta Plant	PBR No(s).:	106.261

GENERAL INFORMATION			
Regulated Entity No.:	RN106597875	Project Type:	Permit by Rule Application
Customer Reference No.:	CN604261545	Date Received by TCEQ:	June 6, 2017
City/County:	Portland, San Patricio County	Date Received by Reviewer:	June 9, 2017
Physical Location:	2800 Kay Bailey Hutchinson Rd		

CONTACT INFORMATION			
Responsible Official/ Primary Contact Name and Title:	Ms. Shannon Parham Environmental Manager	Phone No.:	(361) 229-2865
		Fax No.:	
		Email:	

GENERAL RULES CHECK	YES	NO	COMMENTS
Is confidential information included in the application?		X	
Has the PBR fee been paid?	X		
Is this registration certified?	X		
Is this an APWL site?		X	
Are there any upstream or downstream affects associated with this registration?		X	An increase in production of HBI on an annual or hourly basis or processing rate for the fines is not expected. All related emissions, such as moving the material, are accounted for within the registration or the existing PSD air permit.
Is planned MSS included in the registration?		X	
Are there affected NSR or Title V authorizations for the project?	X		NSR Permit 108113 and PSDTX1344. Emissions should be incorporated into permit 108113 at next amendment or renewal
Is each PBR > 25/250 tpy?		X	
Are PBR sitewide emissions > 25/250 tpy?		NA	Site has gone through Public Notice
Are there permit limits on using PBRs at the site?		X	
Is PSD or Nonattainment netting required?		X	PSD or Nonattainment netting not required.
Do NSPS, NESHAP, or MACT standards apply to this registration?		X	
Does NOx Cap and Trade apply to this registration?		X	There are no NOx emissions associated with this project.
Is the facility in compliance with all other applicable rules and regulations?	X		Company represents that the site is in compliance with all other applicable rules and regulations.

DESCRIBE OVERALL PROCESS AT THE SITE
Voestalpine Texas LLC operates a direct reduced iron (DRI) and hot briquette iron (HBI) production facility near Portland, San Patricio County. The facility will receive iron oxide pellets by ship and convert them into iron briquettes. Site is authorized under NSR Permit 108113 and PSDTX1344.

DESCRIBE PROJECT AND INVOLVED PROCESS
Voestalpine Texas LLC submitted Form PI-7 CERT to authorize emissions from the addition of new storage piles, screeners, and mist sprayer emission control equipment at the La Quinta Plant. Additional storage piles and screeners at existing piles will be added to the La Quinta Plant to accommodate additional material processed at the facility. Additional storage is needed because the facility, for the short term, received more raw material by ship on a monthly basis than can be stored in the process building. Annual ore usage, however, will not exceed what was permitted in the PSD permit. Also, fines generated by material handling during the process will be sent to the Fines Recycling Plant, which will eventually be fed back into the main process as feedstock. Until the material can be processed, the fines need a storage location. The storage piles (EPNs 41 through 62) will contain various grades of hot-briquetted iron, direct reduced iron, and various iron oxide pellets, fines, and chips. These materials are exposed to the atmosphere as they are loaded and unloaded using a front-end loader. Fugitive dust generated by the storage piles is controlled by a DB-60 DustBoss® mister using water spray. Additionally, the piles are partially covered with a tarp when the DB-60 DustBoss® mister is not in use. Voestalpine has assumed a control efficiency of 70% for these combined control methods. Lastly, particulate screeners are being added to existing storage piles (EPNs 14 and 36). Detailed emission calculations are on file.

TECHNICAL SUMMARY - DESCRIBE HOW THE PROJECT MEETS THE RULES
<p>PBR 106.261 Compliance Demonstration</p> <ul style="list-style-type: none"> The emission point(s) associated with the facilities or changes to facilities are located at least 100 ft from the nearest off-site receptor. The total new or increase emissions will comply with the applicable hourly and annual emission limits as represented in the table below. There are no changes to or addition of any pollution abatement equipment. Visible emissions to the atmosphere, from any point or fugitive source, do not exceed 5.0 opacity in any six-minute period. This registration is not for authorization for construction or to change a facility authorized under another section of this chapter or under standard permit.

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	147082	Company Name:	Voestalpine Texas LLC	APD Reviewer:	Nancy Akintan
Project No.:	270052	Unit Name:	La Quinta Plant	PBR No(s).:	106.261

PBR 106.261(2)				
Air Contaminant	Emission Limit		Actual Emissions	
	Lb/hr	Tpy	lb/hr	tpy
Fe ₂ O ₃ Dust	6.00	10.00	5.85	9.10
TOTAL EMISSIONS:			5.85	9.10*

* PM is inclusive of PM10 and PM2.5

COMMUNICATION LOG			
Date	Time	Name/Company	Subject of Communication
6/27/17	4.10pm	Ms. Shannon Parham	<p>Ms. Parham:</p> <p>I am currently reviewing the above referenced PBR Registration for the addition of new storage piles, screeners, and mist sprayer emission control equipment at the La Quinta Plant.</p> <p>Kindly give more information on why the additional storage is needed. Is the project going to cause increase in production and are there any upstream or downstream affects associated with this registration?</p> <p>I will appreciate your immediate response. TCEQ has a 5 day policy on missing/deficient information.</p> <p>Regards</p>
6/28/17	10.24am		<p>Ms. Akintan,</p> <p>Additional storage is needed because the facility, for the short term, received more raw material by ship on a monthly basis than can be stored in the process building. Annual ore usage, however, will not exceed what was permitted in the PSD permit. Also, fines generated by material handling during the process will be sent to the Fines Recycling Plant, which will eventually be fed back into the main process as feedstock. Until the material can be processed, the fines need a storage location.</p> <p>As far as upstream/downstream affects, an increase in production of HBI on an annual or hourly basis or processing rate for the fines is not expected. All related emissions, such as moving the material, are accounted for within the registration or the existing PSD air permit.</p> <p>Best Regards, Shannon</p>

EPN / Emission Source	PM (TSP)		PM ₁₀		PM _{2.5}		VOC		NOx	
	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy
14 / HBI Pile Screener	2.43	2.43	0.82	0.82	0.06	0.06				
36 / Remet / Fines Storage Screener	0.73	0.14	0.24	0.05	0.02	<0.01				
41 / Remet 35,000 mt	0.12	0.18	0.04	0.04	0.01	<0.01				
42 / 5,000 mt HBI Chips/Fines	0.05	0.07	0.02	0.02	<0.01	<0.01				
43 / 5,000 mt Baghouse Fines	0.12	0.45	0.04	0.12	<0.01	0.04				
44 / 75,000 mt Grade C HBI	0.23	0.31	0.09	0.07	0.03	0.01				
45 / 60,000 mt Iron Ore Pellets RH 20	0.20	0.26	0.08	0.06	0.02	0.01				
46 / 100,000 mt Iron Ore Pellets LKAB BFP	0.14	0.39	0.04	0.09	0.01	0.02				
47 / 30,000 mt Iron Ore Fines	0.15	0.57	0.04	0.15	<0.01	0.02				
48 / 30,000 mt Iron Ore Fines	0.15	0.57	0.04	0.15	<0.01	0.02				
49 / 15,000 mt Iron Ore Fines	0.21	0.50	0.07	0.13	0.02	0.01				
50 / 5,000 mt HBI Chips (+6.3mm)	0.14	0.45	0.04	0.12	<0.01	0.01				
51 / 5,000 mt HBI	0.05	0.07	0.02	0.02	<0.01	<0.01				
52 / 5,000 mt HDRI Clusters	0.05	0.07	0.02	0.02	<0.01	<0.01				
53 / 5,000 mt HBI Startup (Mix HBI Chips/Remet)	0.05	0.07	0.02	0.02	<0.01	<0.01				
54 / 5,000 mt HBI Warm Up (Mix HBI/DRI)	0.05	0.07	0.02	0.02	<0.01	<0.01				
55 / 75,000 mt Grade A HBI	0.23	0.31	0.09	0.07	0.03	0.01				
56 / 15,000 mt Iron Ore Fines/Pellets	0.21	0.50	0.07	0.13	0.02	0.01				
57 / 5,000 mt HBI Chips (-6.3mm)	0.14	0.45	0.04	0.12	<0.01	0.01				
58 / 5,000 mt FRP Cold Briquettes/Fines	0.03	0.07	0.01	0.02	<0.01	<0.01				
59 / 20,000 mt Iron Ore Coated Pellets RH 20	0.09	0.12	0.03	0.03	<0.01	<0.01				
60 / 20,000 mt Iron Ore Coated Pellets RH 20	0.09	0.12	0.03	0.03	<0.01	<0.01				
61 / 5,000 mt HBI Sludge	0.11	0.45	0.03	0.12	<0.01	0.01				
62 / 5,000 mt Iron Ore Sludge	0.11	0.45	0.03	0.12	<0.01	0.01				
TOTAL EMISSIONS (TPY):		9.10		2.52		0.28				


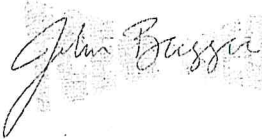
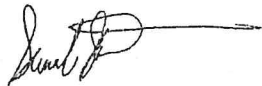
MAXIMUM OPERATING SCHEDULE:	Hours/Day	Days/Week	Weeks/Year	Hours/Year	8,760
------------------------------------	-----------	-----------	------------	------------	-------

SITE REVIEW / DISTANCE LIMIT	Yes	No	Description/Outcome	Date	Reviewed by
Site Review Required?		X			

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	147082	Company Name:	Voestalpine Texas LLC	APD Reviewer:	Nancy Akintan
Project No.:	270052	Unit Name:	La Quinta Plant	PBR No(s).:	106.261

PBR Distance Limits Met?	X	>100 feet from the nearest property line and 1000 feet to the nearest off-plant receptor	06/23/2017	As represented by the company
--------------------------	---	---	------------	----------------------------------

	TECHNICAL REVIEWER	PEER REVIEWER	FINAL REVIEWER
SIGNATURE:			
PRINTED NAME:	Ms. Nancy Akintan	Mr. John Bregger	Mr. Sam Short, Manager
DATE:	June 28, 2017	June 28, 2017	July 06, 2017

Questions or Comments >>

[Search Options](#) [CR Query](#) [TCEQ Home](#)

Go To: Title V Federal Operating Permits

07/13/2017 -----AirPermits IMS - PROJECT RECORD -----

Customer Name: VOESTALPINE TEXAS LLC
 Legal Name: voestalpine Texas LLC
 CN Number: CN604261545

Region: CORPUS CHRISTI Account: Central Registry Id: RN106597875
 County Name: SAN PATRICIO City: CORPUS CHRISTI ETJ
 Location : FROM CORPUS CHRISTI TAKE US-181N ONTO FM RD 136 AND GO APPROX 1.0 MI GO R ONTO LA QUINTA RD/PVT RD 87A AND THE SITE IS APPROX 2.0 MI DOWN ON R. IT IS BOUNDED ON THE E BY LA QUINTA RD AND THE S BY CORPUS CHRISTI BAY

PROJECT INFORMATION

Project Administrative Name: PBR NEW REGISTRATION
 Project Technical Name: LA QUINTA PLANT

Project Number: 270052 Permit Number: 147082
 Project Received Date: 06/06/2017 Renewal Date: Issued Date: 07/06/2017

Project Type: INITIAL Permit Type: PERMIT BY RULE
 Project Status: COMPLETE

Assigned Staff:
 REVIEW ENG: AKINTAN , NANCY PEERREVIEW: BREGGER , JOHN

Staff Group:
 RR TEAM 1

FEE

Reference	Fee Receipt Number	Amount	Fee Receipt Date	Fee Payment Type
325033	5B2EA000261235	450.00	06/06/2017	CC

TRACKING ELEMENTS

TE Name	Start Date	Complete Date
PEER / MANAGER REVIEW PERIOD	06/28/2017	07/06/2017
PEER / MANAGER REVIEW PERIOD	06/28/2017	07/06/2017
DEFICIENCY CYCLE	06/27/2017	06/28/2017
ENGINEER INITIAL REVIEW COMPLETED (DATE)	06/21/2017	
PROJECT RECEIVED BY ENGINEER (DATE)	06/09/2017	

PROJECT RULES:

Unit Desc	Rule Desc	On Application	Approve
FACILITIES (EMISSION LIMITATIONS)	106.261	Y	Y

[Site Help](#) | [Disclaimer](#) | [Web Policies](#) | [Accessibility](#) | [Our Compact with Texans](#) | [TCEQ Homeland Security](#) | [Contact Us](#)
[Statewide Links](#) | [Texas.gov](#) | [Texas Homeland Security](#) | [TRAIL Statewide Archive](#) | [Texas Veterans Portal](#)

© 2002-2014 Texas Commission on Environmental Quality

See note: Who Fills out the EAR? u

Enforcement Action Referral Rev. 3/18/2002	Inv. #	1415945	Initiated by: Region, LP, Central:	Region
	Enf Case		Name of Initiating Office:	REGION 14 - CORPUS CHRISTI
	Media Code:	AQ		

Section 1: Respondent

ID	CN604261545		Role	RESP PARTY
Name	VOESTALPINE TEXAS LLC			
Mailing Address	Street/PO Box	2800 KAY BAILEY HUTCHISON RD		
	City/State/Zip	PORTLAND, TX 78374		
	Phone	(361) 704-9000	Fax	(361) 704-9090

ID	CN600336150		Role	REFERFROM
Name	CITY OF PORTLAND			
Mailing Address	Street/PO Box			
	City/State/Zip			
	Phone		Fax	

Primary Contact (NOE Contact)			
Name	HELMUT SCHWARZ	Organization	VOESTALPINE TEXAS LLC
Title	Chief Technical Officer	Phone	(361) 229-0760
		Fax	(361) 704-9090

Section 2: Respondent's Facility/Operation (F/O)

F/O ID	RN106597875		
F/O Name	LA QUINTA PLANT		
F/O Physical Address	FROM CORPUS CHRISTI TAKE US-181N ONTO FM RD 136 AND GO APPROX 1.0 MI GO R ONTO LA QUINTA RD/PVT RD 87A AND THE SITE IS APPROX 2.0 MI DOWN ON R. IT IS BOUNDED ON THE E BY LA QUINTA RD AND THE S BY CORPUS CHRISTI BAY		
Location City	CORPUS CHRISTI ETJ	Location Zip	78374
Location County	SAN PATRICIO	Operational Status	Active
Primary Business Activity	DRI & HBI Operations	Type of Small Entity	None of the Above
SNC or HPV?	N/A	SIC Code	3312
Potentially Affected Area	Residential Areas in Portland, Texas	Complaints Closed	50
List any NOV's?Orders for same or similar violations at this F/O in the past 5 years.	N/A		

Additional IDs	108113 147082 GHGPSDTX43 PSDTX1344M1
-----------------------	---

Section 3: Summary of Violations

See note: Inclusion of Resolved or Verbal Violations u

Viol Num	Requirements Cited Violation Description	Violation Dates		Investigation/ File Review	Date of...		CAT
		Start	End		NOV	NOE	
651644	30 TAC Chapter 101.4	Unknown	Unknown	05/16/2017		11/03/2017	B
	5C THSC Chapter 382.085(b)	Unknown	Unknown	05/16/2017		11/03/2017	B
Failure to prevent nuisance dust conditions.							
651649	30 TAC Chapter 101.20(3)	02/17/2017	07/06/2017	05/16/2017		11/03/2017	B
	30 TAC Chapter 116.115(c)	02/17/2017	07/06/2017	05/16/2017		11/03/2017	B
	5C THSC Chapter 382.085(b)	02/17/2017	07/06/2017	05/16/2017		11/03/2017	B
	PERMIT PSDTX1344M1, Special Condition 17	02/17/2017	07/06/2017	05/16/2017		11/03/2017	B
Failure to store iron ore pellets in enclosed storage.							
651654	30 TAC Chapter 116.110(a)	02/17/2017	07/06/2017	05/16/2017		11/03/2017	B
	5C THSC Chapter 382.085(b)	02/17/2017	07/06/2017	05/16/2017		11/03/2017	B
Failure to obtain proper authorization.							

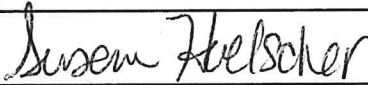

Section 4: Additional Discussion

Based on the current investigation (refer to Investigation Nos. 1415945, 1430244, 1430249) of 141 complaints responded to on May 16, 2017, May 17, 2017, May 18, 2017, May 19, 2017, May 20, 2017, May 23, 2017, May 24, 2017, May 25, 2017, May 26, 2017, May 30, 2017, June 2, 2017, June 5, 2017, June 8, 2017, June 13, 2017, June 15, 2017, June 23, 2017, June 30, 2017, July 13, 2017, July 19, 2017, September 8, 2017, and October 16, 2017 that documented nuisance dust conditions, the documented noncompliance warrants formal enforcement for the number of citizens in the Portland community impacted by the metallic particles (iron ore dust). The citizens have been unable to have normal use and enjoyment of their property due to the accumulation of the iron ore dust on and in their residences, in their pools, in their yards, on their children's outdoor play equipment, and on their vehicles. A variance request was approved by Ms. Susan Clewis, TCEQ R14 Regional Director, on August 16, 2017 to initiate formal enforcement against the La Quinta Plant.

Section 5: Additional Issues

N/A

Section 6: Information About Initiating Office

	Name	Susan Hoelscher	Date	11/2/17
	Signature		E-Mail	Susan.Hoelscher@tceq.texas.gov
	Phone	361-825-3118		
	Name	Kelly Ruble	Date	11/3/17
	Signature		E-Mail	Kelly.Ruble@tceq.texas.gov
	Phone	361-825-3106		

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
INTEROFFICE MEMORANDUM

To: Susan Clewis, Regional Director
Corpus Christi Region Office

Date: August 16, 2017

Thru: Kelly Ruble, Air Section Manager
Corpus Christi Region Office

From: Susan Hoelscher, Environmental Investigator
Corpus Christi Region Office

Subject: Request to initiate enforcement against Voestalpine Texas LLC-
La Quinta Plant, 2800 Kay Bailey Hutchinson Road,
Portland (San Patricio County), Texas
TCEQ Regulated Entity Number: RN106597875

In accordance with the TCEQ's formal enforcement initiation criteria guidance document, Ms. Susan Hoelscher, TCEQ Corpus Christi Region Air Section Environmental Investigator (EI), is requesting to initiate enforcement against this facility.

Voestalpine Texas LLC's La Quinta Plant is located east/southeast of Portland in San Patricio County, Texas. The La Quinta Plant consists of Direct Reduced Iron (DRI) and Hot Briquetting Iron (HBI) operations. The general process at the facility includes the conversion of iron oxide pellets into iron pellets that are pressed into iron briquettes. The DRI process consists of two main components, a Reformer (to produce the reducing agent) and the DRI reactor (where the reaction occurs). The DRI process converts pre-processed iron oxide pellets into highly metallized iron in the form of DRI or HBI.

On **May 16, 2017**, the TCEQ Corpus Christi Region Office started receiving citizen complaints that alleged metallic particles on their property (including vehicles) allegedly from the La Quinta Plant. The TCEQ Corpus Christi Region Office continued receiving complaint's until **July 18, 2017** with a total of **139 complaints**. Complaint investigations were conducted on **19 days** with the assistance of 19 TCEQ Corpus Christi Region Staff. Tape lift samples were initially obtained at each residence. However, due to the number of complaints that were continuously received, tape lift samples began being obtained only if the metallic particles could not be confirmed with a magnet at the residence. If the EIs could document the metallic particles at the citizen's residence without obtaining a tape lift sample, the citizen was noted as impacted by the metallic particles. All tape lift samples obtained were compared to the reference samples collected on **May 17, 2017** from the outdoor storage piles at the La Quinta Plant. It was documented that there were outdoor storage piles of iron ore pellets, fines, clusters, chips, sludge, and remet. The x-ray spectra of the samples from the citizens' residences were confirmed consistent with the reference samples. The metallic particles were documented at citizens' residences located up to approximately three miles to the northwest, west, and southwest of Voestalpine. Southeast, east, and northeast winds would have impacted these areas. It should be noted that the prevailing winds are from the southeast.

On **May 24, 2017**, additional samples were collected from ten of the outdoor storage piles at the La Quinta Plant for a heavy metal analysis.

On **June 6, 2017**, Voestalpine Texas LLC submitted a notification for a permit by rule (PBR) registration, Title 30 Texas Administrative Code (TAC) §106.261, to authorize emissions for the outdoor storage piles. There were 20 unauthorized storage piles, Emission Point Numbers (EPNs) 41-61, of iron ore pellets, fines, chips, sludge, and remet. The amount stored in each pile ranged from approximately 35 metric tons to 95,000 metric tons. On **July 6, 2017**, the PBR Registration No. 147082 was issued to the La Quinta Plant certifying the emissions of the outdoor storage piles under 30 TAC §106.261.

On **June 23, 2017**, a 30 second ambient air tape lift sample was collected at the backyard of a complainant's residence which bordered an open field directly downwind of the La Quinta Plant. The results of the tape lift indicated metallic particles were present. In addition, citizen collected evidence (CCE) was submitted to the TCEQ Corpus Christi Region Office on **July 14, 2017** also indicating that the dusting issue had been ongoing.

As a result of these investigations, the following three Category B Violations (as per the TCEQ Enforcement Initiation Criteria) were documented:

- 1. Title 30 Texas Administrative Code (TAC) §101.4 and Title 5C Texas Health & Safety Code (THSC) §382.085(b)** - Failure to prevent nuisance dust conditions. Specifically, Voestalpine Texas LLC failed to prevent a discharge from any source whatsoever one or more air contaminants or combinations thereof, in such concentration and of such duration as are or may tend to be injurious to or to adversely affect human health or welfare, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property. Based upon a response to 139 citizen complaints received on May 16, 2017, May 17, 2017, May 18, 2017, May 19, 2017, May 20, 2017, May 21, 2017, May 22, 2017, May 23, 2017, May 24, 2017, May 25, 2017, May 26, 2017, May 30, 2017, May 31, 2017, June 2, 2017, June 5, 2017, June 7, 2017, June 8, 2017, June 12, 2017, June 13, 2017, June 14, 2017, June 16, 2017, June 19, 2017, June 20, 2017, June 22, 2017, June 27, 2017, June 30, 2017, and July 18, 2017, by the TCEQ's onsite observations, analyses of samples collected, and review of citizen collected evidence, it was determined that deposits of particulate matter (iron ore dust) from the La Quinta Plant were found in sufficient concentration and of such duration to interfere with normal use and enjoyment of property. Nuisance dust conditions were documented on May 16, 2017, May 17, 2017, May 18, 2017, May 19, 2017, May 20, 2017, May 23, 2017, May 24, 2017, May 25, 2017, May 26, 2017, May 30, 2017, June 2, 2017, June 5, 2017, June 8, 2017, June 13, 2017, June 15, 2017, June 23, 2017, June 30, 2017, July 13, 2017, and July 19, 2017.

- 2. TCEQ New Source Review (NSR) Permit No. 108113/PSDTX1344M1 Special Condition (SC) 17; Title 30 Texas Administrative Code (TAC) §101.20(3) and §116.115(c), and Title 5C Texas Health & Safety Code (THSC) §382.085(b)** - Failure to store iron ore pellets in enclosed storage. Specifically, Voestalpine Texas LLC began storing iron ore pellets outside at the La Quinta Plant on February 17, 2017. The outside storage of iron ore pellets was verified during onsite sampling events on May 17, 2017 and May 24, 2017. As of June 6, 2017, Voestalpine Texas LLC had five outside storage piles containing iron ore pellets, Emission Point Numbers (EPN) 45, 46, 56, 59, 60.
- 3. Title 30 Texas Administrative Code (TAC) §116.110(a) and Title 5C Texas Health & Safety Code (THSC) §382.085(b)** - Failure to obtain proper authorization. Specifically, Voestalpine Texas LLC began storing iron ore pellets outside on February 17, 2017 and continued to store additional piles of fines, clusters, chips, sludge, and remet, EPNs 41 through 61, without obtaining authorization.

Based on the current investigation (refer to Investigation Nos. 1415945, 1430244, 1430249) of **139 complaints** responded to on May 16, 2017, May 17, 2017, May 18, 2017, May 19, 2017, May 20, 2017, May 23, 2017, May 24, 2017, May 25, 2017, May 26, 2017, May 30, 2017, June 2, 2017, June 5, 2017, June 8, 2017, June 13, 2017, June 15, 2017, June 23, 2017, June 30, 2017, July 13, 2017, and July 19, 2017 that documented nuisance dust conditions, the documented noncompliance warrants formal enforcement for the number of citizens in the Portland community impacted by the metallic particles (iron ore dust). The citizens have been unable to have normal use and enjoyment of their property due to the accumulation of the iron ore dust on and in their residences, in their pools, in their yards, on their children's outdoor play equipment, and on their vehicles.

For your convenience, at the bottom of this page is an area where this request can be marked either "Approved" or "Not Approved." If you have any questions concerning this report, please contact me at (361) 825-3118.

Susan Hoelscher 8/16/17
 Susan Hoelscher (Date)
 TCEQ R14 Environmental Investigator

Kelly Ruble 8/16/17
 Kelly Ruble (Date)
 TCEQ R14 Air Section Manager

Request for initiating enforcement is:

Approved

Not Approved

Susan Clewis 8/16/17
 Susan Clewis (Date)
 TCEQ R14 Regional Director

Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Jon Niermann, *Commissioner*
Richard A. Hyde, P.E., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 3, 2017

CERTIFIED MAIL #91 7199 9991 7038 1504 0215
RETURN RECEIPT REQUESTED

Mr. Helmut Schwarz
Chief Technical Officer
Voestalpine Texas LLC
2800 Kay Bailey Hutchison Road
Portland, Texas 78374

Re: Notice of Enforcement for the Complaint Investigation at:
La Quinta Plant, 2800 Kay Bailey Hutchison Road, Portland (San Patricio County), Texas
Regulated Entity No.: 106597875; Investigation Nos.: 1415945, 1430244, and 1430249

Dear Mr. Schwarz:

On May 16, 2017 through October 16, 2017, Ms. Susan Hoelscher of the Texas Commission on Environmental Quality (TCEQ) Corpus Christi Region Office conducted an investigation of the above-referenced regulated entity to evaluate compliance with applicable requirements for air quality. During this investigation, certain alleged violations were documented. Enclosed is a copy of the investigation report and a summary which lists the investigation findings and recommended corrective actions. Additional recommended corrective actions may be provided by the Enforcement Division.

In the listing of the alleged violations we have cited applicable requirements, including TCEQ rules. Please note that both the rules themselves and the agency brochure entitled *Obtaining TCEQ Rules* (GI 032) are located on our agency website at <http://www.tceq.texas.gov> for your reference. If you would like a hard copy of this brochure mailed to you, you may call and request one from either the Corpus Christi Regional Office at (361) 825-3100 or the Central Office Publications Ordering Team at (512) 239-0028.

Also, please be advised that the Legislature has granted enforcement powers to the TCEQ to carry out its mission to protect human health and the environment. Due to the apparent seriousness of the alleged violations, formal enforcement action has been initiated, and additional violations may be cited upon further review. We encourage you to immediately begin taking actions to address the outstanding alleged violation.

In responding with prompt corrective action, the administrative penalty to be assessed may be limited.

Mr. Helmut Schwarz
Page 2
November 3, 2017

The Commission recognizes that the great majority of the regulated community wants to prevent pollution and to comply with environmental laws. We dedicate considerable resources toward making voluntary compliance achievable, but where compliance has not been met it is our duty to protect the public and the environment by enforcing the state's environmental laws, regulations, and permits.

Also, if you believe the violations documented in this notice have been cited in error **and** you have additional information that we are unaware of, you may request a meeting to discuss this enforcement matter. To request a meeting, send a letter describing the additional information to the address shown below.

Manager, Air Section
Enforcement Division, MC 219
Re: Enforcement Meeting Request
Texas Commission on Environmental Quality
PO Box 13087
Austin, Texas 78711-3087

If you or members of your staff have any questions, please feel free to contact Ms. Hoelscher in the Corpus Christi Region Office at (361) 825-3100.

Sincerely,



Kelly Edward Ruble
Air Section Manager
Corpus Christi Region Office
Texas Commission on Environmental Quality

KER/SMH/mjd

Enclosures: Investigation Report with Summary of Investigation Findings

cc: Ms. Shannon L. Parham, Environmental Manager, Voestalpine Texas LLC
Mr. Cade Mason, Staff Attorney, Voestalpine Texas LLC

Summary of Investigation Findings

LA QUINTA PLANT	Investigation # 1415945
, SAN PATRICIO COUNTY,	Investigation Date: 05/16/2017
Additional ID(s): GHGPSDTX43 PSDTX1344M1 108113 147082	

OUTSTANDING ALLEGED VIOLATION(S) ASSOCIATED TO A NOTICE OF ENFORCEMENT

Track No: 651644 Compliance Due Date: To Be Determined
30 TAC Chapter 101.4
5C THSC Chapter 382.085(b)

Alleged Violation:

Investigation: 1415945

Comment Date: 11/02/2017

Failure to prevent nuisance dust conditions. Specifically, Voestalpine Texas LLC failed to prevent a discharge from any source whatsoever one or more air contaminants or combinations thereof, in such concentration and of such duration as are or may tend to be injurious to or to adversely affect human health or welfare, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property. Based upon a response to 141 citizen complaints received on May 16, 2017, May 17, 2017, May 18, 2017, May 19, 2017, May 20, 2017, May 21, 2017, May 22, 2017, May 23, 2017, May 24, 2017, May 25, 2017, May 26, 2017, May 30, 2017, May 31, 2017, June 2, 2017, June 5, 2017, June 7, 2017, June 8, 2017, June 12, 2017, June 13, 2017, June 14, 2017, June 16, 2017, June 19, 2017, June 20, 2017, June 22, 2017, June 27, 2017, June 30, 2017, July 18, 2017, August 24, 2017, and October 13, 2017, by the TCEQ's onsite observations, analyses of samples collected, and review of citizen collected evidence, it was determined that deposits of particulate matter (iron ore dust) from the La Quinta Plant were found in sufficient concentration and of such duration to interfere with normal use and enjoyment of property. Nuisance dust conditions were documented on May 16, 2017, May 17, 2017, May 18, 2017, May 19, 2017, May 20, 2017, May 23, 2017, May 24, 2017, May 25, 2017, May 26, 2017, May 30, 2017, June 2, 2017, June 5, 2017, June 8, 2017, June 13, 2017, June 15, 2017, June 23, 2017, June 30, 2017, July 13, 2017, July 19, 2017, September 8, 2017, and October 16, 2017.

Recommended Corrective Action: Submit to the TCEQ Corpus Christi Office written corrective actions implemented to prevent a similar noncompliance in the future. Furthermore, comply with any requirement(s) that the TCEQ Enforcement Division specifies.

ALLEGED VIOLATION(S) NOTED AND RESOLVED ASSOCIATED TO A NOTICE OF ENFORCEMENT

Track No: 651649

30 TAC Chapter 101.20(3)
30 TAC Chapter 116.115(c)
5C THSC Chapter 382.085(b)

PERMIT 108113, PSDTX1344M1, Special Condition 17
Iron ore pellets shall be stored in enclosed storage.

Alleged Violation:

Investigation: 1415945

Comment Date: 09/26/2017

Failure to store iron ore pellets in enclosed storage. Specifically, Voestalpine Texas LLC began storing iron ore pellets outside at the La Quinta Plant on February 17, 2017. The outside storage of iron ore pellets was verified during onsite sampling events on May 17, 2017

and May 24, 2017. As of June 6, 2017, Voestalpine Texas LLC had five outside storage piles containing iron ore pellets, Emission Point Numbers (EPNs) 45, 46, 56, 59, 60.

Recommended Corrective Action: Submit to the TCEQ Corpus Christi Office written corrective actions implemented to prevent a similar noncompliance in the future. Furthermore, comply with any requirement(s) that the TCEQ Enforcement Division specifies.

Resolution: On June 6, 2017, Voestalpine Texas LLC submitted a notification for a permit by rule (PBR) registration, Title 30 Texas Administrative Code (TAC) §106.261, to authorize emissions for the outdoor storage piles. There were 20 unauthorized storage piles, Emission Point Numbers (EPNs) 41-61, of iron ore pellets, fines, chips, sludge, and remet. On July 6, 2017, the PBR Registration No. 147082 was issued to the La Quinta Plant certifying the emissions of the outdoor storage piles under 30 TAC §106.261.

Track No: 651654

30 TAC Chapter 116.110(a)

5C THSC Chapter 382.085(b)

Alleged Violation:

Investigation: 1415945

Comment Date: 08/17/2017

Failure to obtain proper authorization. Specifically, Voestalpine Texas LLC began storing iron ore pellets outside on February 17, 2017 and continued to store additional piles of fines, clusters, chips, sludge, and remet, EPNs 41 through 61, without obtaining authorization.

Recommended Corrective Action: Submit to the TCEQ Corpus Christi Office written corrective actions implemented to prevent a similar noncompliance in the future. Furthermore, comply with any requirement(s) that the TCEQ Enforcement Division specifies.

Resolution: On June 6, 2017, Voestalpine Texas LLC submitted a notification for a permit by rule (PBR) registration, Title 30 Texas Administrative Code (TAC) §106.261, to authorize emissions for the outdoor storage piles. There were 20 unauthorized storage piles, Emission Point Numbers (EPNs) 41-61, of iron ore pellets, fines, chips, sludge, and remet. On July 6, 2017, the PBR Registration No. 147082 was issued to the La Quinta Plant certifying the emissions of the outdoor storage piles under 30 TAC §106.261.

Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Jon Niermann, *Commissioner*
Richard A. Hyde, P.E., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 3, 2017

CERTIFIED MAIL #91 7199 9991 7038 1504 0215
RETURN RECEIPT REQUESTED

Mr. Helmut Schwarz
Chief Technical Officer
Voestalpine Texas LLC
2800 Kay Bailey Hutchison Road
Portland, Texas 78374

Re: Notice of Enforcement for the Complaint Investigation at:
La Quinta Plant, 2800 Kay Bailey Hutchison Road, Portland (San Patricio County), Texas
Regulated Entity No.: 106597875; Investigation Nos.: 1415945, 1430244, and 1430249

Dear Mr. Schwarz:

On May 16, 2017 through October 16, 2017, Ms. Susan Hoelscher of the Texas Commission on Environmental Quality (TCEQ) Corpus Christi Region Office conducted an investigation of the above-referenced regulated entity to evaluate compliance with applicable requirements for air quality. During this investigation, certain alleged violations were documented. Enclosed is a copy of the investigation report and a summary which lists the investigation findings and recommended corrective actions. Additional recommended corrective actions may be provided by the Enforcement Division.

In the listing of the alleged violations we have cited applicable requirements, including TCEQ rules. Please note that both the rules themselves and the agency brochure entitled *Obtaining TCEQ Rules* (GI 032) are located on our agency website at <http://www.tceq.texas.gov> for your reference. If you would like a hard copy of this brochure mailed to you, you may call and request one from either the Corpus Christi Regional Office at (361) 825-3100 or the Central Office Publications Ordering Team at (512) 239-0028.

Also, please be advised that the Legislature has granted enforcement powers to the TCEQ to carry out its mission to protect human health and the environment. Due to the apparent seriousness of the alleged violations, formal enforcement action has been initiated, and additional violations may be cited upon further review. We encourage you to immediately begin taking actions to address the outstanding alleged violation.

In responding with prompt corrective action, the administrative penalty to be assessed may be limited.

Mr. Helmut Schwarz
Page 2
November 3, 2017

The Commission recognizes that the great majority of the regulated community wants to prevent pollution and to comply with environmental laws. We dedicate considerable resources toward making voluntary compliance achievable, but where compliance has not been met it is our duty to protect the public and the environment by enforcing the state's environmental laws, regulations, and permits.

Also, if you believe the violations documented in this notice have been cited in error **and** you have additional information that we are unaware of, you may request a meeting to discuss this enforcement matter. To request a meeting, send a letter describing the additional information to the address shown below.

Manager, Air Section
Enforcement Division, MC 219
Re: Enforcement Meeting Request
Texas Commission on Environmental Quality
PO Box 13087
Austin, Texas 78711-3087

If you or members of your staff have any questions, please feel free to contact Ms. Hoelscher in the Corpus Christi Region Office at (361) 825-3100.

Sincerely,



Kelly Edward Ruble
Air Section Manager
Corpus Christi Region Office
Texas Commission on Environmental Quality

KER/SMH/mjd

Enclosures: Investigation Report with Summary of Investigation Findings

cc: Ms. Shannon L. Parham, Environmental Manager, Voestalpine Texas LLC
Mr. Cade Mason, Staff Attorney, Voestalpine Texas LLC

Summary of Investigation Findings

LA QUINTA PLANT	Investigation # 1415945
, SAN PATRICIO COUNTY,	Investigation Date: 05/16/2017
Additional ID(s): GHGPSDTX43 PSDTX1344M1 108113 147082	

OUTSTANDING ALLEGED VIOLATION(S) ASSOCIATED TO A NOTICE OF ENFORCEMENT

Track No: 651644 Compliance Due Date: To Be Determined
30 TAC Chapter 101.4
5C THSC Chapter 382.085(b)

Alleged Violation:

Investigation: 1415945

Comment Date: 11/02/2017

Failure to prevent nuisance dust conditions. Specifically, Voestalpine Texas LLC failed to prevent a discharge from any source whatsoever one or more air contaminants or combinations thereof, in such concentration and of such duration as are or may tend to be injurious to or to adversely affect human health or welfare, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property. Based upon a response to 141 citizen complaints received on May 16, 2017, May 17, 2017, May 18, 2017, May 19, 2017, May 20, 2017, May 21, 2017, May 22, 2017, May 23, 2017, May 24, 2017, May 25, 2017, May 26, 2017, May 30, 2017, May 31, 2017, June 2, 2017, June 5, 2017, June 7, 2017, June 8, 2017, June 12, 2017, June 13, 2017, June 14, 2017, June 16, 2017, June 19, 2017, June 20, 2017, June 22, 2017, June 27, 2017, June 30, 2017, July 18, 2017, August 24, 2017, and October 13, 2017, by the TCEQ's onsite observations, analyses of samples collected, and review of citizen collected evidence, it was determined that deposits of particulate matter (iron ore dust) from the La Quinta Plant were found in sufficient concentration and of such duration to interfere with normal use and enjoyment of property. Nuisance dust conditions were documented on May 16, 2017, May 17, 2017, May 18, 2017, May 19, 2017, May 20, 2017, May 23, 2017, May 24, 2017, May 25, 2017, May 26, 2017, May 30, 2017, June 2, 2017, June 5, 2017, June 8, 2017, June 13, 2017, June 15, 2017, June 23, 2017, June 30, 2017, July 13, 2017, July 19, 2017, September 8, 2017, and October 16, 2017.

Recommended Corrective Action: Submit to the TCEQ Corpus Christi Office written corrective actions implemented to prevent a similar noncompliance in the future. Furthermore, comply with any requirement(s) that the TCEQ Enforcement Division specifies.

ALLEGED VIOLATION(S) NOTED AND RESOLVED ASSOCIATED TO A NOTICE OF ENFORCEMENT

Track No: 651649

30 TAC Chapter 101.20(3)
30 TAC Chapter 116.115(c)
5C THSC Chapter 382.085(b)

PERMIT 108113, PSDTX1344M1, Special Condition 17
Iron ore pellets shall be stored in enclosed storage.

Alleged Violation:

Investigation: 1415945

Comment Date: 09/26/2017

Failure to store iron ore pellets in enclosed storage. Specifically, Voestalpine Texas LLC began storing iron ore pellets outside at the La Quinta Plant on February 17, 2017. The outside storage of iron ore pellets was verified during onsite sampling events on May 17, 2017

and May 24, 2017. As of June 6, 2017, Voestalpine Texas LLC had five outside storage piles containing iron ore pellets, Emission Point Numbers (EPNs) 45, 46, 56, 59, 60.

Recommended Corrective Action: Submit to the TCEQ Corpus Christi Office written corrective actions implemented to prevent a similar noncompliance in the future. Furthermore, comply with any requirement(s) that the TCEQ Enforcement Division specifies.

Resolution: On June 6, 2017, Voestalpine Texas LLC submitted a notification for a permit by rule (PBR) registration, Title 30 Texas Administrative Code (TAC) §106.261, to authorize emissions for the outdoor storage piles. There were 20 unauthorized storage piles, Emission Point Numbers (EPNs) 41-61, of iron ore pellets, fines, chips, sludge, and remet. On July 6, 2017, the PBR Registration No. 147082 was issued to the La Quinta Plant certifying the emissions of the outdoor storage piles under 30 TAC §106.261.

Track No: 651654

30 TAC Chapter 116.110(a)

5C THSC Chapter 382.085(b)

Alleged Violation:

Investigation: 1415945

Comment Date: 08/17/2017

Failure to obtain proper authorization. Specifically, Voestalpine Texas LLC began storing iron ore pellets outside on February 17, 2017 and continued to store additional piles of fines, clusters, chips, sludge, and remet, EPNs 41 through 61, without obtaining authorization.

Recommended Corrective Action: Submit to the TCEQ Corpus Christi Office written corrective actions implemented to prevent a similar noncompliance in the future. Furthermore, comply with any requirement(s) that the TCEQ Enforcement Division specifies.

Resolution: On June 6, 2017, Voestalpine Texas LLC submitted a notification for a permit by rule (PBR) registration, Title 30 Texas Administrative Code (TAC) §106.261, to authorize emissions for the outdoor storage piles. There were 20 unauthorized storage piles, Emission Point Numbers (EPNs) 41-61, of iron ore pellets, fines, chips, sludge, and remet. On July 6, 2017, the PBR Registration No. 147082 was issued to the La Quinta Plant certifying the emissions of the outdoor storage piles under 30 TAC §106.261.

AIR CP_106597875_CP_20171016_Investigation_1430249_
Texas Commission on Environmental Quality
Investigation Report

The TCEQ is committed to accessibility. If you need assistance in accessing this document, please contact oce@tceq.texas.gov

Customer: voestalpine Texas LLC
Customer Number: CN604261545

Regulated Entity Name: LA QUINTA PLANT
Regulated Entity Number: RN106597875

Investigation # 1430249

Incident Numbers

263318	258660
260266	258764
260594	259029
258990	258765
259825	260216
259152	259692
260419	259694
259004	258992
259842	259001
260903	258968
260218	260561
258669	260253
259693	259752
267252	259742
261418	261445
258626	258648
258996	259695
260219	262147
259150	260562
270289	258969
258763	

Investigator: SUSAN HOELSCHER

Site Classification PERMIT BY RULE
PREVENTION OF
SIGNIFICANT
DETERIORATION
GREENHOUSE GAS PSD
CASE-BY-CASE

Conducted: 05/16/2017 -- 10/16/2017

NAIC Code: 331110

NAIC Code: 331111

SIC Code: 3312

Program(s): AIR NEW SOURCE PERMITS

Investigation Type: Data Maintenance File Review

Location: FROM CORPUS CHRISTI TAKE US-181N
ONTO FM RD 136 AND GO APPROX 1.0 MI GO R
ONTO LA QUINTA RD/PVT RD 87A AND THE SITE
IS APPROX 2.0 MI DOWN ON R. IT IS BOUNDED ON
THE E BY LA QUINTA RD AND THE S BY CORPUS
CHRISTI BAY

Additional ID(s): GHGPSDTX43
PSDTX1344M1
108113
147082

LA QUINTA PLANT - CORPUS CHRISTI ETJ

5/16/2017 to 10/16/2017 Inv. # - 1430249

Address: ,

Local Unit:

Activity Type(s):

Principal(s):

Role	Name
RESPONDENT	VOESTALPINE TEXAS LLC

Contact(s):

Role	Title	Name	Phone
REGULATED ENTITY CONTACT	PROCESS WATER COORDINATOR/ENVIRONMENTAL SPECIALIST	MR DOMINICK HERNANDEZ	Work (361) 704-9000
REGULATED ENTITY CONTACT	ENVIRONMENTAL MANAGER	MS Shannon Parham	Cell (361) 229-2865 Work (361) 704-9000 Fax (361) 704-9090
REGULATED ENTITY CONTACT	HEAD OF SAFETY, SECURITY & EMERGENCY	TIM VANLANDINGHAM	Fax (361) 704-9090 Cell (361) 800-1669 Work (361) 704-9000
REGULATED ENTITY CONTACT	CHIEF TECHNICAL OFFICER	HELMUT SCHWARZ	Cell (361) 229-0760 Work (361) 704-9000 Fax (361) 704-9090
PARTICIPATED IN	STAFF ATTORNEY	MR JESS ROBINSON	Phone (512) 239-0455
PARTICIPATED IN	ATTORNEY AT LAW, OUTSIDE COUNSEL	MS LARA PRINGLE	Work (713) 437-1831 Fax (713) 437-1924
PARTICIPATED IN	ATTORNEY AT LAW, OUTSIDE COUNSEL	MIKE CHERNEKOFF	Cell (832) 260-5740 Fax (504) 589-8264 Phone (713) 437-1827

Other Staff Member(s):

Role	Name
QA Reviewer	CYNTHIA SMITH
Supervisor	KELLY RUBLE

Associated Check List

Checklist Name

Unit Name

Investigation Comments:

Due to database limitations, three investigations, TCEQ Investigation Nos. 1415945 (Citizen 1-50), 1430244 (Citizen 51-100), and 1430249 (Citizen 101-141), were created to associate all incidents. Refer to TCEQ Investigation No. 1415945 for the complete report.

No Violations Associated to this Investigation

Signed Susan Heitscher
Environmental Investigator

Date 11/2/17

Signed Kelly Doble
Supervisor

Date 11/3/17

Attachments: (in order of final report submittal)

- Enforcement Action Request (EAR)
- Letter to Facility (specify type) : _____
- Investigation Report
- Sample Analysis Results
- Manifests
- Notice of Registration

- Maps, Plans, Sketches
- Photographs
- Correspondence from the facility
- Other (specify) : _____
- _____
- _____

AIR CP_106597875_CP_20171016_Investigation_1430244_
Texas Commission on Environmental Quality
Investigation Report

The TCEQ is committed to accessibility. If you need assistance in accessing this document, please contact oce@tceq.texas.gov

Customer: voestalpine Texas LLC
Customer Number: CN604261545

Regulated Entity Name: LA QUINTA PLANT
Regulated Entity Number: RN106597875

Investigation # 1430244

Incident Numbers

258479	258413
258595	258475
258546	258415
258480	258203
258418	258468
258227	258472
258420	258199
258590	258421
258570	258474
258423	258553
258405	258424
258167	258476
258554	258308
258596	258581
258470	258591
258572	258223
258408	258309
258287	258482
258473	258646
258599	258200
258575	258589
258477	258557
258484	258471
258565	258580
258282	258485

Investigator: SUSAN HOELSCHER

Site Classification PERMIT BY RULE
PREVENTION OF
SIGNIFICANT
DETERIORATION
GREENHOUSE GAS PSD
CASE-BY-CASE

Conducted: 05/16/2017 -- 10/16/2017

NAIC Code: 331110

NAIC Code: 331111

SIC Code: 3312

Program(s): AIR NEW SOURCE PERMITS

Investigation Type: Data Maintenance File Review

Location: FROM CORPUS CHRISTI TAKE US-181N
ONTO FM RD 136 AND GO APPROX 1.0 MI GO R
ONTO LA QUINTA RD/PVT RD 87A AND THE SITE
IS APPROX 2.0 MI DOWN ON R. IT IS BOUNDED ON
THE E BY LA QUINTA RD AND THE S BY CORPUS
CHRISTI BAY

Additional ID(s): GHGPSDTX43
PSDTX1344M1
108113

147082

Address: ,

Local Unit:

Activity Type(s):

Principal(s):

Role	Name
RESPONDENT	VOESTALPINE TEXAS LLC

Contact(s):

Role	Title	Name	Phone
PARTICIPATED IN	ATTORNEY AT LAW, OUTSIDE COUNSEL	MIKE CHERNEKOFF	Cell (832) 260-5740 Phone (713) 437-1827 Fax (504) 589-8264
REGULATED ENTITY CONTACT	PROCESS WATER COORDINATOR/ENVI RONMENTAL SPECIALIST	MR DOMINICK HERNANDEZ	Work (361) 704-9000
REGULATED ENTITY CONTACT	ENVIRONMENTAL MANAGER	MS Shannon Parham	Cell (361) 229-2865 Fax (361) 704-9090 Work (361) 704-9000
REGULATED ENTITY CONTACT	HEAD OF SAFETY, SECURITY & EMERGENCY	TIM VANLANDINGHAM	Work (361) 704-9000 Fax (361) 704-9090 Cell (361) 800-1669
PARTICIPATED IN	ATTORNEY AT LAW, OUTSIDE COUNSEL	MS LARA PRINGLE	Work (713) 437-1831 Fax (713) 437-1924
REGULATED ENTITY CONTACT	CHIEF TECHNICAL OFFICER	HELMUT SCHWARZ	Cell (361) 229-0760 Fax (361) 704-9090 Work (361) 704-9000
PARTICIPATED IN	STAFF ATTORNEY	MR JESS ROBINSON	Phone (512) 239-0455

Other Staff Member(s):

Role	Name
Supervisor	KELLY RUBLE
QA Reviewer	CYNTHIA SMITH

Associated Check List

Checklist Name

Unit Name

Investigation Comments:

Due to database limitations, three investigations, TCEQ Investigation Nos. 1415945 (Citizen 1-50), 1430244 (Citizen 51-100), and 1430249 (Citizen 101-141), were created to associate all incidents. Refer to TCEQ Investigation No. 1415945 for the complete report.

No Violations Associated to this Investigation

Signed *Susem Heelscher*
Environmental Investigator

Date 11/2/17

Signed *Kelly Ruble*
Supervisor

Date 11/3/17

Attachments: (in order of final report submittal)

- Enforcement Action Request (EAR)
- Letter to Facility (specify type) : _____
- Investigation Report
- Sample Analysis Results
- Manifests
- Notice of Registration

- Maps, Plans, Sketches
- Photographs
- Correspondence from the facility
- Other (specify) : _____
- _____
- _____

