Cottonwood

size of landfill

when installed (commenced construct)

types of waste received

how many wells/parcels

complaints?

type of control

when installed

Fugitive Dust Plan - 5.4

surface monitoring plan

major or area source

records of max. aggregate

annual emiss. of fugitive

PM from traffic areas

asbestos.

4 sources

Landfill

Rock Crusher Unit

Crusher Engine - HP?

Tub Grinder Engine - HP?

permitted but not here got rid of it

SSM plan

Calibration records

collection & control sys. design plant

surface monitoring last 3-5 years

nonproductive areas?

pre inspection Notes

design capacity

uncontrolled emissions in megrams/year

NMOC initial & latest design cap report

NMOC emission rate - latest

wind erosion

parking & roadway

entrainment

dry landfill activities

Is any part closed

areas of landfill (parcels)

types of waste accepted etc

Rock Crusher

monthly records of throughput

inspection records of water sprays

moisture content of aggregate & testing

see if water sprays running

supposed to have meter

2-4 inches from ground

flare

how undicate continuous flame presence

bypass line secured

Continuous Records of the indication of flow to control device or flare

see rule

& bypass records

60.759 - PE cert. of well placement & migration remedy

any fires or suspected fires preinspection
any + pressure due to use of geomembrane or synthetic cover

decommissioned wells?
design changes?
list of current applicable parameters & monitoring data

monitor
perimeter
along pattern that traverses the landfill at 30 meter intervals & where usual observations indicate elevated [ ] of gas (distressed veg.) cracks or seeps in cover)

shutdown of control system.

60.18
no VE for no more than 5 min/2 hrs
type of flare - steam assisted
air assisted
non assisted
calculation ~~to show~~ of max expected gas generation flow to determine cap. of requirement that system can handle max expected flow from entire landfill over time
gas collected sufficient extraction rate

location of each exceedance marked
~~marked~~ location recorded
cover ~~adjustments~~ maintenance + vacuum adjustment
permitted 10 days

monitoring program for cover
integrity + implementing repairs
as needed.

closure reports

Annual reports
(initial annual report includes 608
test)
- exceedances
- bypass
- control device down > 1hr
- collection down > 5 days
- 500ppm exceedance
- well expansions

Initial PTest also includes

See recordkeeping
60.759

Cottonwood landfill

7/29 arrived 7:25 at hotel - turned on FID to warm up (1)

Ray got boots on TVR-1000 Foxboro no odors

Calibration starting

0 ppm - accepted air cal gas

500 ppm accepted methane in air

2000 ppm accepted methane in air

10000 ppm accepted methane in air

Thomas Hunsell, mechanic came over said he would get someone

Kevin ~~[illegible]~~ Frate, Site Manag

Bill Rayner, told him about complaints

0 ppm - 0.38 ppm background

~~250~~ acres of permitted landfill

not all have waste

30 acres of wasted

206 acres

27 gas wells installed about

~~1999~~ 2000 started garbage

just MSW ~~only~~ mostly

permitted for some special waste - industrial sludges flyash

CND - take some construction & demolition 200 tons/week

take in 5 tons/week 20

don't know how many wells ②
flare open (passive) - 2005 around
gas have blower system - yes but doesn't know
gas technician doesn't doesn't
buildy another 5 acres cell
2054 life of landfill
did Phase 1, Phase 2, Phase 3
doing Phase 3 NW now
some is closed a little each year
L at final grade
Closed part - roughly 6 weeks

Certain height of garbage or closed - capped
5 years
excavating soil to replace w/ clay
start at bottom + go up
wells need to be above clay liner certain # of feet mid slope & above
① (methane)
gas probes on outside of
perimeter ② Ambient air quality monitor + in town Hall quarter

gas wells checked gas levels (3)
& uses & he does this once per year
turning well

gas probes - once per year - State rule

methane % O_2 & N_2 > gas technic once per month & annually gas probes

48-52% ideal

50% ideal

1) gas probes on methane outside of ~~parameter~~ perimeter

2) H_2S handheld - established points to monitor quarterly & inside town

within certain distance of waste line

monitoring of wells - 5 days
~~up~~ adjust have 5 days
not sure if have to redrilled

flare
auto start if goes off
auto dialer - calls if out
not sure

doesn't know how marked
doesn't know if ever had
exceedance

only does
flat areas where no garbage
no slopes
permeation done through gas probes
doesn't know how often or
how many points
don't have surface monitoring
plan

not sure

doesn't think
there's a
set
place he
goes

not receiving
garbage but not
closed
started - 2000 in cancer &
worked out

final → 3 feet of clay - final
3 feet top soil

intermediate 1 foot dirt

ever night 6 inches
or tarp - 100 X 100 canvex
blanket
alternate daily cover
have a leachate system

leachate

(5)

3 sump stations
pumped out when reached
to manhole
gravity
to WWTP

certain level
several times
per day
Kickspumps

Raynor - 5 years - 30 years total
other guy - October 2013

final cap - photo
flare - photo
GP - once per year photo
GW - permit photo on hill
Saw water trucl - daily
flare if shuts down - prepare start up
& then if does + work - dial

flare parameters 1387 F
1343 scfm

-3993 WC
gary back same road to start
then other road

Not operating today - rock crusher (6)
has water sprays
GP = gas probe
groundwater wells also present
placing final cap -
saw where they are
where trucks are
photo -

GP-05 - photo - across
road
went to office wait ~~for~~ to get vests
& for Denny Dennison technician

845 am in office about

Denny arrived -

Denny said there was
erosion on ~~north side~~ ~~Southe~~
northeastern slope (East slope)
Carey ~~oddens~~ to south. phase 5
Ray measuring now
> 500 pm ~~photo~~ photo didn't find any in rut

2 photos of erosion
multiple exceedances
wells planned for ~~hear~~ hear
[3rd quarter
[4th QRT

Reducing after dirt ~~3rd and~~ ~~[illegible]~~ 3rd spot
phase 3 - NE

truck by - lot of dust
lat - 38.257
long - 89.777 okay
pulled the grip off for dirt
filling water truck + lunch
Ray: edge of waste on slope with
grass. next to office
(phase 1 N)

Nothing here
final cover 3 feet clay
3 feet dirt

truck w/ dirt - uncovered

~~1200~~ 200 tons/day
20 trucks/day

IEPA require 945 Perry arrives ambient air monitoring - signs outside waste

subsurface probes outside the perimeter

surface scan 4 in about cover

wind less than 5 mph

recently have been doing quarterly H_2S monitoring in town perimeter) (have a plan)

~~don~~ haven't had too many exceedances unless clay cover cracks

if no hits: puts single highest reading

quarterly surface scan

surpentine pattern random specific no points

yes - seldom > 50 m

39 M cubic yds - design capacity

Tier 2 stayed ~~bl~~ below for 2 years

HAPS - non major

non major for everything

2/2008 - flare

Milam - major

pig a hole & ~~bury~~ bury
no designated area
keep track 2012 last time
got some

22 wells
8 more next year to be installed

green fuel corp
black installed - dots are gas
(headerlines) wells

red - to be installed
5 year gas plan 2003 - design plan
2008 - amended

active area on diagram

subsurface probes
tuning
subsurface
migration

are adding wells to increase density

ROI
radius of influence

2 Myds surfaces
clay ROI not
as high as Milam
dry site here

flare - continuously measure temp 2-8
recorded every ~~[illegible]~~ min

flow to flare - same thing
each month download SV card

thermocouple - flare shuts off
~~[illegible]~~ with blower (fan) goes off
vacuum activated
valve
shut off

no bypass

auto restart program automatically
don't know if mike gets
call if first shutdown
or can't restart

SSM plan - yes

mike arrives 10:15 - called
when can't auto restart
after 3 times or so

mike - every 50 feet -
120 pts
serpentine
mostly top - not perimeter of
collection area
because it's on
slope
4 to 1

Mike - started a year ago - no (4)
exceedances, Mike's been here
a year.
Keep a quarterly - one person in time
< 200 ppm mostly
if 500 ppm put a foot of dirt
on it haven't in last
year
had some over 500 pm before
this year.

June 23 (2nd quart)
2009 - put coordinates 5300 ppm
a foot of dirt fixed it
2010 - Mark - nothing
~~[illegible]~~

Ray: 3 lines x 3 = 9 < 500 pm
- 30 meters apart + 6 more
on top

Mike: 3 - 3½ years to do site
wells - 2½ - 3 hours
Chris' ~~[illegible]~~ Cahnorsky - IEPA contact @ 618-346-5120
flare - has been shutdown
more than hour
but collection system not
more than 5 days

Homecomple
maybe OV
sense heat or flow
upon not sound
shuts blowy - no vacuum
~~[illegible]~~ closes valve
so can't force vent

Gem 2000 (5)

calibrating

monitors methane - methane - 50% 35%

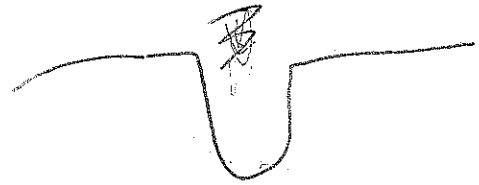
CO_2

O_2

balance gas (N_2)

T

& P



-129-130°F

shoved me T $O_2 = 0$

& P

automatically records

when methane is too high

pull a little to increase vacuum

finished ready & adjustments -

static pressure at well - neg

system pressure - should be neg

diff pressure - should be + (flow)

straight w/ grand 12 in

Ray 2 cracks > 500 ppm on roadway photo

14 R at bottom - > 500 ppm photo

exterior 4 to 1 (less steep)

interior stages 3 to 1 (steeper)

537 —

Ray: 3000ppm

(6)

immediate adjacent to active area

asked for load of dirt

700pm 3 pictures (one closeup) at crack ~~[illegible]~~ 200 feet east of active area

odors in that area

odors on road W

crosion gulley

gestubes for dust control for pneumatic unloading

Windy high readings > 500 pm is the phase 3 NE w/ where they are putty mod wells N-5 to ~~NE~~ ~~NW~~ NW plan on installing wells to S-SE

3 exceedances 2 in away from surface from surface photo

dam slope - reel smelling

measuring wheel - 2 Hach hand held to it roll along