Help! The Sky Is Falling!

Nope, Just a Cell Antenna.

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Philadelphia Suburban Water Company
What Are Your Concerns?

1. Before Signing Contract
2. During Installation or Upgrades
3. Future Trends
1. Concerns: Before Signing Contract

Just Say No!
Carefully Weight Pros & Cons

**PROS**
- Revenue Stream
- Better Cell Service

**CONS**
- Unfair Contracts
- Site Security
- Tank Damage
- Safety Issues
- Equipment Falling
- Liability Risk
- Personnel Time & Hassle For Access

**OTHERS?**
Contracts

• Review by Tank Engineer w/ cell experience.
• Provisions for repainting.
• Provisions to review and inspect new and upgraded equipment, paid for by carrier.
• Some renegotiate contracts when changes made to equipment.
2. Concerns: Installation or Upgrades

#1 Tank Owner Concern? Site Security
Worker falls from water tower
Security Solutions:

• 24-Hour notice in writing
  • Names of personnel on site
  • Work being done & when
  • Safety training & insurance cert
  • Background checks
• Escort at all times
• Video monitoring on site
• Smart gates
Safety
2.5 EQUIPMENT DEPLOYMENT
SITE NUMBER: PL03XC064
SITE NAME: NEW BRITAIN
2009 CLEARVIEW ROAD
SOUDERTOWN, PA 18964

SITE INFORMATION

SITE NAME: NEW BRITAIN
SITE NUMBER: PL03XC064
SITE ADDRESS: 2009 CLEARVIEW ROAD, SOUDERTOWN PA 18964

COORDINATES:
N 39° 56' 28.9"
W 75° 13' 10.4"

GROUND ELEVATION:
563.40' TMD 96

STRUCTURE TYPE:
6X12' Aisle

ANTENNA MODEL:
40G3450-1000

PROJECT:
New Site

CONTRACTOR:
Sprint

CODE ANALYSIS

BUILDING CODE:
NEC 2011

ELECTRICAL CODE:
NEC 2011

FIRE SAFETY CODE:
NEC 2011

USE GROUP:
3A (CA4)

CONSTRUCTION TYPE:
2W

VICINITY MAP

PROJECT LOCATION

DRAWING INDEX

INDEX:
T-1
TITLE SHEET
T-2
PROJECT DESCRIPTION

PROJECT CONSISTS OF INSTALLING 100 WIRELESS EQUIPMENT TO AN EXISTING TELECOMMUNICATIONS FACILITY.
Reviewer must know:

- OSHA
- Good tank engineering practices
- Tank maintenance
- Owner’s expectations
- What is there already?
  - Tank accessories
  - Other cell equipment
“...proposed load is less than 5% of the water tank’s original design loads.”
August 25, 2014

Mr. Daniel Preston, PE
Director of Operations and Engineering
North Penn Water Authority
PO Box 1859
Lansdale, PA 19446

Re: Sprint Cellular Antenna Structural Review
Hilltown Tank No. 1 Water Storage Tank

Dear Dan,

As you requested, Entech Engineering, Inc. (Entech) has reviewed the additional documentation provided by Michael Polter of Smartlink related to the proposed Sprint antenna installation at the Hilltown No. 1 Tank. This information was received from Mr. Polter via e-mail dated August 15, 2014. The e-mail contained revised construction drawings with a revision date of August 14, 2014.

We have reviewed this additional information in conjunction with the previous information that had been provided related to this project. We have concluded that all of our previous comments in our August 4, 2014 review letter have been satisfactorily addressed. We therefore recommend that Sprint be allowed to proceed with this project, provided all administrative items have been adequately addressed to NPWA’s satisfaction.

We trust this information will be of use to you. Please contact us if you have any questions or require more information.

Sincerely,

Steven E. Riley, PE
Director of Project Management

cc: Michael Polter, Smartlink
    Christine Gunaullus, MBA
Safety Solutions:

• Review CDs and Engineer’s Calcs.
• Be wary of heavier upgrades.
• Know OSHA rules & regs.
• Pre/Post installation inspection.
• Inspection of studs/welds.
• Require repairs immediately.
• Require carriers to make installations safe during tank repainting.
Can you attribute tank/coatings damage to a carrier?
Tank Damage Solutions:

- Pre/Post installation inspection.
- Require repairs immediately.
- Stay on top of carrier/contractor.
Liability

• Can a Tank Owner be sued?
Personnel Time/Hassle

- How much time does it take?
- Ideally one person coordinates
- Emergency upgrades?
  - “Bad planning on your part does not constitute an emergency on my part.”
- Is there a checklist of what to do?
- Who pays?
  - Carrier
  - Escrow
  - Owner
3. Concerns: Future Trends

Consolidation of Carriers

• Loss of revenue.
• Getting old equipment off tank & site.
• Get contractor back for corrections.
Roof Corral
New Construction
Magnets?
Lessons Learned

- Just say no.
- Weigh pros & cons carefully.
- Remember that installers
  - don’t care about tanks;
  - don’t know OSHA;
  - don’t know paint.
- ALWAYS wear your hard hat on site.
Questions?

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