
On December 6, 2011, SolarReserve® filed their Final 1041 Application with the Saguache County Commissioners. The Commissioners accepted the filing and gave the public until 3:00 p.m. on Thursday, January 26, 2012 to file written comments. Written comments can be either:

Emailed to: Wendi Maez, Land Use Director at wmaez@saguachecounty-co.gov

Or mailed to: Saguache County Land Use
Wendi Maez, Land Use Director
PO Box 326
Saguache, CO 81149

Saguache County
Land Use

JAN 23 2012

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The Saguache Board of County Commissioners will hold a Public Hearing in the Auditorium of the Center School, Center, Colorado to consider the proposed Final 1041 Permit Request of Solar Reserve from 2:00 p.m. to 8:00 p.m. on February 2, 2012.

These are our second set of comments for the Public Record submitted this 20th day of January, 2012:



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FriedCranes.org

Saguache County, Colorado: SolarReserve®'s Final 1041

Editorial: December 20, 2011

Public Comment Is Being Requested for SolarReserve® Final 1041 Application

The esteemed and right honorable Saguache County Commissioners didn't let any grass grow after receiving the SolarReserve® Final 1041 Application. With unusual and unaccustomed alacrity, they scheduled a public hearing on the application in the Center School from 2:00 to 8:00 p.m. on February 2, 2012. They graciously allowed until 3:00 p.m. on January 26, 2012 the unwashed public an opportunity to submit written comments.

Like the Sam Pace ruled "public meeting" held on December 6, 2010 where more than 150 alarmed Saguache County residents packed the Saguache County Courthouse to voice their concerns about the infamous Tessera Solar project, we harbor few allusion about the fairness of the February event to come.

(By the way, folks, if you thought Tessera Solar was dead and buried with the appropriate aspen stake through its heart, you're wrong. It may be on life-support, but like other zombies, it is still plodding through the process, with an overly generous extension granted by the obsequious Commissioners)

In the last meeting, hours were eaten with self-aggrandizing statements by the applicants and their bought and paid-for engineers. "Public comment" was something that grand Poohbah Sam Pace wasn't about to permit! Attempts by members of the public to hold him to the stated rules for public comment fell on deaf ears.

Like a self-righteous judge in a courtroom, he threatened to have the place cleared by the Sheriff if the public laughed again at any ridiculous statement forwarded by the applicants or engineers.

One such statement that evoked a huge laugh was that dust would not be permitted past the property lines during construction. Really angered the Chief Muftah that we members of the public would dare to laugh! Then one of the applicant's project engineer opined that agriculture and ranching were not important. The room erupted with boo's from all sides. You ain't seen red until you saw Exalted Leader Pace's face at that. We now know what apoplexy looks like in person.

At 6:00 p.m., with nary a word of public comment having been heard, we had to depart to attend to the animals at home. Didn't matter much, anyhow. We saw very clearly that the fix was in.

It was not through any action from the Commissars that the Tessera project failed (so far!) They ran out of money or we'd all be listening to 5,800 really big and noisy engines running loudly outside Moffat.

Here Are a Few Topics for Your Comments, Should You Decide to Submit Them

1. The Benign Molten Salts. These salts are a mixture of sodium nitrate (saltpeter) and potassium nitrate (Chilean saltpeter) which are the primary ingredient in most conventional explosives and fireworks. SolarReserve® has the gall to state in their application that these explosives are not explosive. Just like commercial fertilizer. Of course, it is perfectly safe if it is not detonated. We have been forwarding this concern for months, and Nancy Lauro of Russell Engineering in Durango, Colorado, as a consultant to the Commissioners, confirmed that these nitrates are explosive.

Dynamite can be thrown in the fire and it will burn rather than exploding, assuming it is not fitted with a detonation cap. Timothy McVeigh used a small amount of ammonium nitrate (not as explosive, but more easily obtained) to bring down the Alfred P. Murrah building in Oklahoma City a few years back.

Here's the thing: as opposed to McVeigh's 2-½ tons of explosive, these bozos propose installing 24 million gallons of their "benign molten salts" in the complex. That's 182,000 tons of very high explosives to be presumably protected 24/7 by our Sheriff and a few deputies.

182 kilotons is the equivalent explosive force of 6 atomic bombs the size of those we dropped on Japan at the end of the second World War. No radiation, though -- just lots of heat and fury over a 40 mile radius blast zone encompassing most of the San Luis Valley. What? Me worry? Why should we, if our public servants don't give a rat's ass?

Since we reside in one of what they call "low value structures of little importance surrounding the complex" just four miles away, they need have no concern that we will sue them after the inevitable tragedy, since we will be but mere motes of dust floating aimlessly in the air.

But, cunningly, we are providing enduring powers of attorney to any and all relatives, so they can sue the holy hell out of our County Commissioners on whatever island they have emigrated to after the approval of the project. You must forgive us if we harbor nasty suspicions about their imminent financial improvement!

2. Those Interesting Property Taxes. SolarReserve® is not the least bit ashamed to slop at the public trough for \$1.5 billion of your money for the Saguache County Solar Project. They project making more than \$8.5 million over the first 20 years, making the project actually worth only \$170 million at a 20x p.e. ratio.

So one might ask, "Why is it costing \$1.5 billion to build?" In the real world, they would play hell raising \$100 million from educated investors expecting a return on their initial investment. Poor old Bernie Madoff was nothing compared to these guys, if you ask our opinion. But that's right: you didn't.

But here's the kicker. \$1.5 billion project, yet it is being assessed very interestingly by our County Commissioners. Typically, it would have a assessed value of about \$450 million, or about 30% of the real value. That's how things are done for the other citizens of Saguache County. Then, at the Colorado Statutory 7% of assessed value, they would pay \$31.5 million annually in property taxes.

Well, hold on to your hats! Our all-knowing Commissioners are assessing the massive industrial complex (the largest in Colorado since the construction of DIA) at just \$5.5 million -- resulting in taxes of just \$385 thousand per year.

In other words, our Commissioners are saying the real value is just \$18 million. Ask yourself, "If the house I'm going to build will be worth \$18 million, what are my chances of getting a \$1.5 billion mortgage?"

Hard put to find an answer? Yeah, we're having the same problem. Talk about being upside down on your mortgage. That's 8333% loan over value! If this isn't an example of blatantly criminal corruption, it seemingly has all of the outward appearances of being so. But we aren't lawyers, so how would we know?

3. Those Damned Great Sandhill Cranes. Some delusionary folks living here in the valley claim that 20,000 to 25,000 cranes along with tens of thousands of other migratory wetland birds like Snow Geese and all varieties of ducks migrate along thousands of years established migratory paths from (among others) the Baca Wildlife Refuge to the Monte Vista Wildlife Refuge a couple times a year. Those misguided fools even have something called the Great Sandhill Crane Festival in quaint, unimportant Monte Vista. Worse yet, birders from all over the world travel to Monte Vista to observe these evidently illusory birds.

Why, you ask? Well, according to the bought and paid for "biological expert" hired by Solar Reserve® to assess the environmental impact of their 10 square mile (6,200 acre) industrial complex which just happens to lie along that well-established migratory path, "359 cranes were observed in total and none of them landed on those acres.

Perhaps, like us, you might exclaim loudly, "What a load of cow plops!" (Actually, we used less polite language) Anyone who has traveled from Hooper to Center might also shake their heads at the unmitigated hutzpah of these California folks.

But we're willing to bet big bucks that our Revered County Commissioners will nod solemnly and say, "Yep, yep. 359. Unh-huh. Go on..."

Okay. Here's the thing. They will have two 15 acre ponds of extraordinarily toxic sludge waste stored ever so safely on 40 mil pond liners. Heaven knows those buggers will never leak into the unconfined aquifer lying just below. And the birds and mammals of all sorts will not be attracted to drink from those inviting ponds.

Actually, we don't believe they will survive long enough to get to the ponds. Here's why. Those acres and acres of mirrors (heliostats) aimed at the top of the two very ugly slip-formed concrete-gray 82 story tall towers are designed to create temperatures of 2000 °F to transfer temperatures of 1050 °F to the circulating "benign molten salts" inside the collector at the top of the towers.

You might wonder what happens to the other 950 °F heat that is not collected. Well, dummy, it is vented "harmlessly" into the atmosphere. Unless there is an inversion, of course.

But even in the absence of inversions, the heat surrounding those towers will range from 2000 °F at the top to perhaps 500 °F at the mid-height.

You cook your Thanksgiving turkey at 350 °F in your oven. Now imagine a flock of Great Sandhill Cranes or other migrating waterfowl flying through that oven over the 10 square mile complex. Can you smell burnt feathers? We can. And we're damned sure that none of the poor critters will survive. Hence the name of our website.

4. Building Two Skyscrapers Nearly as High as the Tallest Building in Denver. Imagine two Republic Plaza's transplanted here to Saguache County. About 150 feet at the base, looming 656 feet toward the sky. That's mighty big, homie!

Now consider the foundation. 80 feet of sand permeated with water (the unconfined aquifer) resting on 400 feet of spongy, water-soaked blue clay, floating 4200 feet above the bedrock below on the watery depths of the confined aquifer directly below the proposed SolarReserve® industrial complex. To support those ugly 82 story gray monoliths, SolarReserve® will need to sink dozens of massive rebar-reinforced concrete-filled caissons into the bedrock so far below.

Imagine constructing nearly mile long caissons down through our precious aquifers without contaminating the water upon which we depend.

We see uncanny resemblances to the deep-water drilling done in the Gulf of Mexico by British Petroleum. And those poor bastards didn't have to build the kind of caissons needed here, and they really didn't have to worry about contaminating a fresh water supply.

Further, no one has ever attempted such large penetrations of the upper aquifer. You might want to discuss this problem with one of our well drillers here in the valley, where well drilling is done like nowhere else in Colorado. Well, if something goes wrong, it won't be SolarReserve's® problem. They can always just walk away, can't they?

Won't mention the problems of sinking four 6 million gallon tanks down into the confined aquifer as proposed in their final 1041 to prevent collection of non-vented, but accumulating precipitated "benign salts" somehow actually vented from their non-contained tops of the tanks.

Don't give us a raft about that preceding paragraph. It comes from their ever-so-qualified engineering team. If you are an

engineer, prepare to be horrified by reading their quasi-plausible engineering statements in the final 1041. Remember, they haven't actually built even one of these monstrosities anywhere! This is all scaled up gigo from a science experiment at Sandia Labs years ago and another failed experiment in Barstow, California. Don't worry! Our Saguache County Commissioners trust them implicitly.

5. Who Needs a Stinkin' Class C Airport, Anyhow? A few months ago, Adam Green of Solar Reserve® informed our Ever-Obliging County Commissioners that there was a problem with the Saguache County Airport (off CR 53) and the FAA. Seems the FAA was requiring a bunch of hoops to be jumped through to change the presently mapped landing pattern for Class C Airplanes (the larger aircraft) to the airport. Seems those damned 82 story towers were directly in the landing pattern. Might take years to change the maps and determine a safe alternate landing pattern.

Responsible officials would have said that if it takes time, let's do it right. But, you guessed it. The very next day they fired off a letter to the FAA effectively abrogating the Class C status for the airport. Means the big firefighting planes won't be allowed to land there in the future, should we have wildfires here at the upper part of the valley. No big deal...

6. Could There Be a Problem with Noise Pollution? The Final 1041 doesn't worry about noise pollution. You should, perhaps, if you live in Saguache County. Our surrounding ring of mountains serves to create a kind of giant boom-box under varying wind conditions. With north winds, we hear cars and trucks accelerating from 50 mph to 65 mph in Moffat, some ten miles away.

Two 100 megawatt steam turbines will run at about 165 decibels each, as best we can determine. Well in excess of the 55 decibels allowed at their property line under Colorado law. Placing them in giant metal buildings ain't gonna help the problem -- it will exacerbate it. Then there are two 100 megawatt generators powered by those turbines. Have you ever been to Hoover Dam? That's the size of those rascals residing in the bowels of the dam. You can hear them from miles away from the dam. Same size, same noise. Think about it.

7. And Then There Is the Issue of Water Utilization. We, in the civilized world, desisted from widespread use of steam engines years and years ago. Why? Because steam engines are heat engines that employ what is known in thermodynamic circles as the "Rankine Cycle". Your car uses the "Otto Cycle" and your diesel truck uses the "Diesel Cycle". The problem with the Rankine Cycle is that it is the very least efficient of all of the engine cycles. Best case, you may get 15% efficiency. If you had one in your car, you would be burning at least twice as much gasoline.

Further, the old steam engine had lots of drawbacks. But the one we want to discuss is the steam engine's use of water. Adam Green of SolarReserve® claimed a few months ago that they would only use about 300 gallons of water a month. Wow! We would suggest that evaporation from their two 15 acre toxic waste sludge ponds would exceed that amount.

Have you ever noticed the great big water towers at regular intervals along the railroads in olden days? They were there because it takes lots and lots of water to run a steam engine. It has to be replaced, because it is vented away. 300 gallons a month for two massively large steam turbines. We mean, they are big! Sure, some recapture might be accomplished, but 300 gallons a month? As our great Aunt Matilda was fond of exclaiming, "There ain't a dime's worth of truth in you!"

8. Build Them and They Will Come: the Towers to Nowhere. Xcel Energy® recently announced that they have scrapped plans to build new transmission lines in the San Luis Valley, at least for seven years. This means that there are absolutely no transmission lines in all of the valley capable of carrying the 200 megawatts purportedly to be generated by SolarReserve®.

This is the dirtiest little secret of all! Why would the American taxpayer be asked to back a green project that absolutely cannot be successful? Isn't this just another Solyndra®?

We are quite outspoken in stating that we believe the engineering claims are extremely poorly thought out and of dubious practicality.

We harbor dark suspicions about the intentions of these politically-well-connected and smarmy executives. We even saw one article in the *Tucson Citizen* that the ill-fated Solyndra® which just went so flamboyantly bankrupt was a subsidiary of Solar Reserve®.

We think something smells wrong when Ron Pelosi is on the board of a company investing heavily in SolarReserve®, when Obama bundler Maurice Frazier visits the White House regularly just before the Solyndra® funding and is vocally advocating for the funding of SolarReserve® with billions of dollars for varying projects including this one, when Ken Salazar's fingerprints are all over not only this project, but the Bureau of Land Management 12,000 page Solar PEIS abortion which includes Federal Transmission Corridors (to hell with the hassle of eminent domain) running down Colorado State Highway 17, U.S. Highway 285 and plumb down the middle of the valley to descend on poor, unsuspecting Hooper with vast arrays of substations. "Who needs the stinkin' approval of the citizens? We elites know far better than the unwashed! We are important and you are not!"

9. The Hundreds of Mythical and Imaginary Jobs Bringing Prosperity to Saguache County. We hate to be the bearers of bad tidings, but these used car salesmen are stroking you big time! Just take a moment to look behind the curtain at the great Oz. How many high-pressure steam fitters capable of installing the miles of high pressure steam lines needed are languishing about in the county? Electrical engineers capable of installing the miles of 100 megawatt wiring and junction boxes? How about massive steam turbine mechanics and installers? 100 megawatt generator operators? Get real!

Best case, when this abortion is finally accomplished, there will be a few jobs for security guards and intermittent, part-time, unskilled window washers to clean the acres of mirrors once in a while and perhaps one person to check the computer connection to Santa Monica, California office where the operation will actually be monitored and controlled remotely.

Perhaps we are lucky they ain't layin' the unadulterated crap on us that they laid on Tonapah, Nevada, where they already

sucked up \$737 million in guarantees from the American taxpayer. In that unsuspecting town they had the gall to claim 4,500 indirect jobs created. Just how much does an "indirect" job pay? Minimum wage or big bucks? Forgive us if we try to understand that particular bit of hogwash in the same light as the millions upon millions of jobs purportedly "saved" by the Obama administration!

We've Run On Way Too Long. Sorry About That!

Frankly, we have little hope that all our railing wildly about something so abjectly wrong will do any good whatsoever. We have believed from the beginning that the fix was in. That this was a done deal on day one. We no longer believe that this particular set of elected officials will ever get off their dead butts to go out and recruit beneficial light industry to locate in our beautiful valley. You know, do their job.

So, we will close by really pissing off the Saguache County Commissioners by wishing you a very Merry Christmas and a Happy New Year!

John and Erika Keyes
Editors
www.FriedCrane.org

FriedCranes.org

Saguache County, Colorado: SolarReserve®'s Final 1041

Editorial: November 14, 2011

"Towers to Nowhere", Thanks to Ken Salazar and SolarReserve@!

The other shoe finally dropped. SolarReserve® submitted its Final 1041 Application to the Saguache County Commissioners at the Tuesday, November 8, 2011 Regular Meeting -- apparently too late to be included in the required legal notice in the *Saguache Crescent* Newspaper of Record for November 3.

And what an application that 1041 was! You can download it [here](#). Rehashes of the interesting computer simulation images plus multiple new ones of just how visually non-polluting the massive towers will be. Paid expert testimony that only 350 Great Sandhill Crane flew over the ten square mile site smack dab between the Baca National Wildlife Refuge and the Monte Vista Wildlife Refuge this last spring! Evidently, the other 24,650 Great Sandhill Cranes magically discerned, somehow, that they needed to detour from their millenia-long traditional migratory path directly over that future wasteland. Go cranes! We are still pursuing the chance to open a Colorado Fried Crane franchise, once the plethora of cooked birds becomes available!

Is This Proof That SolarReserve® Just Wants to Scam the Long-Suffering American Taxpayers Out of Another \$1.5 Billion? You Decide!

No mention whatsoever of just how in the hell they plan to deliver the miraculously created 200 MW of solar electricity to the plain below, in light of Xcel Energy®'s recent decision to abandon all construction of the necessary super-high voltage transmission lines from the San Luis Valley to Denver for the next seven years.

That is the epitome of a "Bridge to Nowhere!"

Who Gets the Remaining, Presumably Unspent \$1,489,000,000.00 of the \$1.5 Billion the Long Suffering American Taxpayer Is Supposed to Guarantee?

SolarReserve®, talking about the property taxes it will pay when the complex is finished, on page 51 of its submission states "Based on this methodology, the initial 100 MW facility will generate \$424,000 in average annual revenues, or approximately \$8.5 million during the first 20 years of operations. Annual property tax revenues range from \$385,000 in the year 1 of operation to \$465,000 in year 20." Or twice that amount with two units.

We're guessing the Commissioners will conform to Colorado Law in assessing the property taxes on the new industrial installations. And we know they wouldn't give SolarReserve® an illegal or non-conforming deal. Presumably, the folks at SolarReserve® didn't set their own property taxes, but consulted with our embarrassingly-obliging Commissioners.

Since taxes are 7% of assessed valuation, that would make [the entire complex assessed at only about \\$11 million](#). Yet SolarReserve® is apparently asserting to the [green-sucking](#) Department of Energy that it will cost \$1.5 Billion. Surely, it would be a fiduciary responsibility of our County Commissioners to assess the massive industrial complex [somewhere close](#) to that proposed real cost, wouldn't it?

So, any prudent person guaranteeing a loan (namely, you!) should ask indignantly, "Where in the hell is the rest of that money going? Into whose pockets?" And people have the gall to complain about Wall Street Fat Cats! Surely nearly a billion and a half dollars aren't necessary for all the payoffs to local, state and federal politicians to get this abortion approved, are they?

Nowadays, it is almost impossible to get rid of the silly notion that there is a stink of corruption wafting all about us. We read in the October 22, 2011 edition of the *Tucson Citizen* that the infamous Solyndra that just went down the dumper to the tune of half a Billion taxpayer bucks is a subsidiary of SolarReserve®. We couldn't independently confirm that assertion, but we note with interest that both companies share incestuously large numbers of directors, investors, officers, and frequent White House visitors. Probably nothing to it...

SolarReserve® Don't Need No Stinkin' Laws of Physics or Chemical Properties!

You will find some astounding reading material provided by SolarReserve®'s bought-and-paid-for-engineers in [Exhibit G to their final 1041 which may be read in its entirety here](#).

Somehow, the most important ingredients in gunpowder, dynamite and fireworks -- sodium nitrate and potassium nitrate -- are safe as ever can be. and we quote them: "In the dry chemical form, contact with combustible material will not cause spontaneous ignition; however, the substance will enhance an existing fire (but not cause an explosion)."

Geez, and gasoline won't ignite if you don't put a match to it, either!

We have demonstrated in earlier editorials that incendiary rounds, explosive rounds or armor piercing rounds fired into their four "safe 6,000,000 gallon tanks (you read it right, not one, but four 6 million gallon tanks) of explosive materials accidentally by hunters could cause a detonation. We have a suggestion for the condescending engineers who prepared Exhibit G: read up on detonators and detonation devices! One can imagine that some RPG's carried over the unsecured border to our south by terrorists might just cause problems.

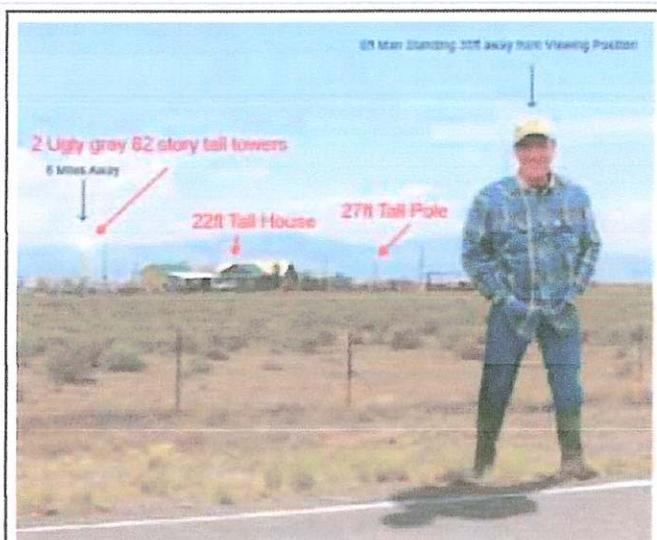
Surely they will have run this all by Homeland Security to get their approval. Well, maybe not, since those folks are busy patting down old ladies and children in airports and closing barn doors well after the horse has escaped. ("Proactive" and "creative" ain't words in their bureaucratic vocabulary)

Despite the chemical property of potassium nitrate **boiling/decomposing** at 752 °F (actually closer to 712.5 °F after correcting for our altitude here in Saguache County) and sodium nitrate **boiling/decomposing** at 716 °F (altitude corrected: 668.9 °F), these properties are denied in Exhibit G.

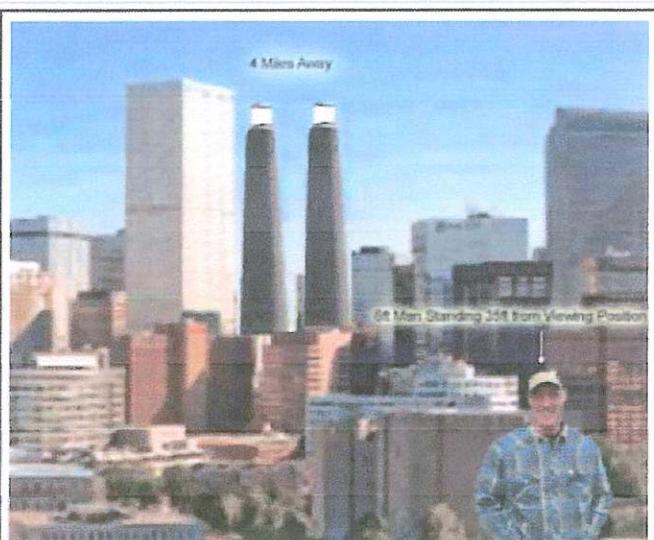
Citing an old amateurish science experiments conducted years ago at Sandia Labs and Barstow, California, SolarReserve® confident states that no problem exists in operating the "benign eutectic salts" at temperatures of 1050 °F or, occasionally at somewhat high temperatures in unbelievably huge tanks that will be **open to the atmosphere!** Again we quote, "The molten salt storage tanks will be open to the atmosphere (through vents, described below) and a nitrogen "blanket" atmosphere will not be needed."

You read it correctly! The salts will be **boiling/decomposing** at the proposed operational temperatures, but those **decompositional gas** will simply be **vented** into our pristine Saguache County air. No problem! No problem!

Do You Believe Your Lying Eyes or SolarReserve®'s Bought-and-Paid-For "Computer Simulations"?



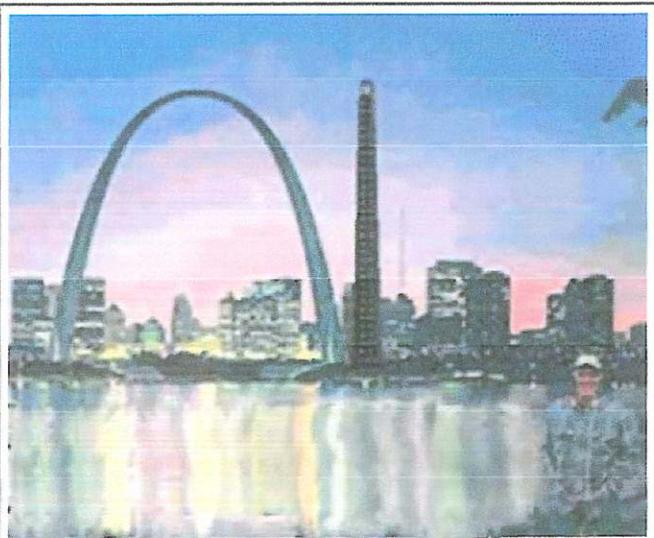
Their computer simulation from 2.3 miles north of Hooper on Highway 17, showing both 82 story tall towers at the left.



Downtown Denver - our Photoshop® simulation to similar scale as theirs. 82 story tall ugly gray towers are kinda **big**.



SolarReserve®'s computer simulation showing the two 82 story tall ugly towers as seen from Crestone. Do you see them?



Our simulation of the St. Louis Arch from nearly the same distance. Look really, really hard! Can you see the tower?

And we aren't even going to dignify their absolutely audaciously insulting nighttime computer simulations with comments in this editorial. We'll save that for a later editorial when we have gotten our breath back!

We Sincerely Hope the Congressional Committees Investigating the Abysmal Solyndra Scam Will Take the Time to Look into This Potentially More Exciting Loan Guarantee!

We will assiduously forward our comments on these 82 story tall, incredibly ugly gray twin towers being proposed to loom skyward to create a behemoth visual blight gracing The Great Sand Dunes National Park and Recreation Area, the potential extinction of tens of thousands of migratory wetland birds, the very real potential for the contamination of both the San Luis Valley unconfined and confined aquifers (incidentally, why isn't President Obama worrying about **our** aquifers as he ponders the possible contamination of the Nebraska aquifer by the new oil pipeline?) and a potentially massively disastrous explosive potential to the appropriate congressional committees if the plaintive hopes that someone back there in that political quicksand will by chance happen to pay attention -- stopping this deplorable loan guarantee before it happens. Yeah, we know! This limited liability company has already sopped \$737 million from the public trough. We just think that now, they're just being piggish!

Gotta admit our prospects ain't very high for action to stop this abortion, but then we are ever hopeful!

John and Erika Keyes
Editor
www.FriedCrane.org



Saguache County, Colorado: SolarReserve®'s Final 1041

Editorial: January 2, 2012

When Explosives Are Found in Estancia, New Mexico, the Sheriff, the FBI, the ATF and the National Guard Rush to Close State Highway 41 and Evacuate Neighbors on Dec. 31, 2011!

State Road 41 outside Estancia, NM was closed and neighbors were all evacuated for safety Saturday and Sunday while the FBI, the ATF and a New Mexico National Guard team, along with a large number of explosives experts, dismantled a small laboratory containing some few chemical experiments.

The landlord discovered the lab on Friday morning, Dec. 30. The trailer house and sheds had been rented by a 20 year Sandia National Labs Chemist who died recently at the age of 80.

The massive official response was due to a relatively small amount of explosive chemicals being found.



Why Are Local, State and Federal Agencies Concerned About a Small Quantity of Explosives in New Mexico When 182,000 Tons of High Explosives Are Planned for Southern Colorado?

Because SolarReserve® of Santa Monica, California is planning a purportedly "green energy" project using these explosives, local and federal agencies including the local County Commissioners, the local Sheriff, Homeland Security, the Environmental Protection Agency, the Federal Bureau of Investigation, Alcohol, Firearms and Tobacco Bureau and the Colorado National Guard evince absolutely no interest rushing to respond as did the proactive New Mexico authorities a mere 200 miles to the south.

SolarReserve® plans to store not just a few pounds of explosives, but 24,000,000 gallons (186,000 tons) of high explosives referred to innocuously as "molten salts" in their PR releases and Final 1041 Application to Saguache County Officials. All without adequate protection aside from a single security guard and whatever protection the Sheriff and a few Deputies patrolling a 3,170 square mile county can provide on their rounds.

Your humble editors at www.FriedCranes.org have attempted in vain to alert local and federal authorities to the fact that 182 kilotons of molten sodium nitrate (saltpeter) and potassium nitrate (Chilean saltpeter) have the equivalent explosive force to 6 atomic bombs the size of those the U.S. dropped on Hiroshima and Nagasaki at the end of the Second World War. The only redeeming factor is that an explosion of these "molten salts" would not be accompanied by atomic radiation.

The estimated 40 mile radius blast zone would obliterate the 50 mile wide San Luis Valley, home to the Great Sand Dunes National Park and multiple National Wildlife Refuges along with a dozen towns and cities housing thousands of unsuspecting local citizens.

Here's The Bright Side: When Our Totally Predictable Accidental or Purposeful Explosion Occurs, Colorado Will Have a Brand New Tourist Attraction That Will Attract Billions of Dollars in Revenues: **Absolutely the Deepest Fresh Water Lake Anywhere in the World!**

Lake Baikal in the Siberian Region of Russia, was formerly the deepest fresh water lake in the world at 5,369 feet deep, but it won't hold a candle to Lake SolarReserve® (we are the first to suggest that it be named after its creators) with its depth of 30,000 feet -- fully 5-½ times deeper!

Interestingly, The Colorado State Division of Water Resources estimates that the San Luis Valley Confined Aquifer has depths between 10,000 and 30,000 feet lying in the fifty miles between the majestic Sangre de Cristo Mountains to the east and the San Juan and La Garita Mountains to the west.

Unfortunately, all that protects this aquifer is a 400 foot thick "Blue Clay Layer" and about 80 feet of sand "floating" on top of it as a kind of protective membrane. Once the inevitable explosion occurs, there is little doubt that the force of six atomic bombs will rupture the membrane to instantly create an 8000 square mile lake -- certainly the largest in Colorado. And by comparison, it will

be larger than Lake Ontario and 4.4 times larger than the Great Salt Lake.

Since your editors live just 4 miles from the proposed SolarReserve® high explosives site, we will neither survive the explosion nor live to see the massive resulting lake. But let us tell you right now that our hearts swell with overweening pride to know our mortal remains will rest at the bottom of a national landmark of epic proportions!

John and Erika Keyes
Editors

For more information:
www.FriedCrane.org

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Saguache County, Colorado: SolarReserve®'s Final 1041

Editorial: January 3, 2012

We Hope That All of Our Neighbors Take the Time to Write Their Comments (Pro or Con – It's a Free Country, After All!) and Send Them to the Saguache County Commissioners Before January 26, 2012

We have dispatched our own comments today to insure that they arrive in a timely fashion before the deadline the Commissioners have set.

We got rather wordy -- what else is new? But you can find our complete comments for the official public record on the [friedcranes.org website](http://friedcranes.org), along with details about a scheduled public meeting in February.

For those of you who are not enthralled with our expansive and deathless prose in the full comments, here are the high points:

- **SolarReserve's® Project Creates an Extraordinary Safety Hazard:** They're gonna put 182 thousand tons of high explosives (equivalent to six atomic bombs) in 4 tanks with laughable security to prevent detonation by workplace accidents, local hunters, by terrorists or by lightning strikes.
- **Destruction within the Blast Zone:** The 40 mile radius blast zone would obliterate most of the San Luis Valley, with a loss of life of at least 10,000 humans with non-lethal casualties numbering nearly as high, simultaneously creating the largest lake in Colorado (8,000 square miles) and the deepest in the entire world at 30,000 feet.
- **Massive Air Pollution:** The highly explosive "molten salts" for energy storage proposed by SolarReserve® will be boiling/decomposing at 712 °F, and simply vented the into the ambient environment to condense and fall "harmlessly" to the ground according to their 1041 filing.
- **Inadequate Storage of Toxic Waste Sludge:** They propose two 15 acre open air ponds to "evaporate harmlessly" their industrial toxic sludge by-products, with inadequate 40 mil plastic pond liners and leak detection alarms. If a leak is detected, it is far too late to empty the contents of a 15 acre lake into alternate containers of some undisclosed sort before the unconfined aquifer is irretrievably contaminated.
- **No Protection for Indigenous Wildlife:** No precautions are proposed to be taken to prevent birds and animals from sampling the inviting ponds in an ecosystem where surface liquids are anxiously sought.
- **Extreme Danger to Migrating Waterfowl:** 20,000 to 25,000 Great Sandhill Cranes plus tens of thousands of Snow Geese and multiple varieties of Ducks and other migratory waterfowl that migrate to and from Monte Vista twice a year do so from the Great Sand Dunes National Park and the Baca National Wildlife Refuge located just 8 miles to the east of the proposed SolarReserve® site, flying on an thousands-of-years-established migratory path directly over the near 10 square miles where this ill-thought-out industrial complex is to be built.
- **Unreliable "Studies" Performed for SolarReserve®.** An "expert" biologist hired by them officially reported that only 359 Great Sandhill Cranes were observed flying over the site and that none landed on the site. The same biologist was unable to notice any occurrences of the many different endangered species that everyone else in the area has been able to see on occasion. Endangered Species do live on the proposed site: the Uncompahgre Fritillary Butterfly, the Black-footed Ferret, the Mexican Spotted Owl, the Southwestern Willow Flycatcher, the Canada Lynx, the Kangaroo Rat, the Bald Eagle and the Silky Pocket Mouse. Despite the "research" by SolarReserve's® hired biologist, the Colorado State University Natural Heritage Program reports within the area of interest for The SolarReserve® Project in Saguache County, Colorado, both the Silky Pocket Mouse and The Bald Eagle with actual observations in Section 6, Township 40N, Range 010E and Section 12, Township 041N, Range 009E.
- **Migrating Waterfowl Will Be "Fried" in Mid-air!** The two 82 story slip-formed gray concrete towers will be heated with solar rays from thousands of acres of mirrors (heliostats) that will create temperatures of nearly 2000 °F in order to transfer temperatures of 1050 °F to the circulating "molten salts". The heat loss to the ambient will create air temperatures estimated to range from 500 °F to 1000 °F surrounding the towers. This dynamic process will have convective heat losses, but ambient air temperatures averaging 750 °F will stratify on occasion, particularly during our frequent atmospheric inversions, creating a "death field" for the migrating waterfowl. A Thanksgiving turkey is cooked at a mere 350 degrees, by comparison.
- **The Towers Must Be Supported by Caissons to Bedrock:** However, bedrock is at least 10,000 feet -- near 2 miles -- but more probably 30,000 feet -- near 6 miles -- below the site, based upon cross-sectional diagrammatic maps

prepared by the Colorado State Division of Water Resources. [Click here to see these maps](#). But construction of the needed caissons is problematical: Drilling and dropping huge large-diameter caissons of rebar-reinforced concrete to depths at least twice those of the infamous British Petroleum Oil Platform in the Gulf of Mexico through our precious water supplies without creating poisonous contamination is indeed a formidable engineering challenge -- one which may well be impossible.

- **This Is a Hazardous Earthquake Zone and Monumentally High Wind Area:** Any notion that supporting caissons are not needed is simply foolhardy. Just 15 miles away to the east lies the longest earthquake fault in Colorado -- the Sangre de Cristo fault. The winds that created and still maintain the precious sand dunes often exceed 80 miles per hour. Claims that the Sangre de Cristo fault is not active ignores the evidence on the ground of the myriad artesian hot springs erupting from the confined aquifer on the western perimeter of the valley, just east of Colorado State Highway 17, from the Alligator Farm to the Orient Mine Hot Springs. [Click here for the USGS map of the Sangre de Cristo Fault](#)
- **Visual Pollution Is Simply Ignored by These Folks:** The two 82 story tall gray featureless crematorium-like obelisks topped by attention-getting bright magnified solar fire will most certainly detract from the recently congressionally-approved Great Sand Dunes National Park which owes much of its attraction to the pristine, unspoiled surroundings and the adjacent Baca National Wildlife Refuge at the base of the snow-capped Sangre de Cristo mountain range rising majestically more than 14,000 feet above.
- **This Would Be a Massive, Sprawling Industrial Complex Large Enough to Encompass All of the Cities in the San Luis Valley:** SolarReserve® is proposing an ugly industrial complex spreading over 10 square miles just 15 miles to the east of the Great Sand Dunes National Park, belching sublimated explosives and steam high into the air above. The proposed complex is an abomination and should have been stopped before it was ever begun. It would have been stopped dead by any responsible county officials, had they been present. [Click here for an overlay map](#)
- **The Extraordinarily Deceptive "Computer Simulations" Provided by SolarReserve®:** Their computer simulations show 82 story towers barely seen from a distance, yet no taller than an inconveniently adjacent 30 foot tall electrical power pole! We have prepared more realistic simulations to put the lie to their transparent disingenuousness, showing that the towers are taller than the St. Louis Arch, the Statue of Liberty, the tallest redwood in Yosemite Park, the Washington monument, the Leaning Tower of Pisa, the Great Giza Pyramid, Mount Rushmore, the Salida Smelter Smokestack, Old Faithful Geyser, Victoria Falls, the Bellagio in Las Vegas, London's Big Ben, the Rio de Janeiro Jesus, the Seattle Space Needle, Denver's Republic Plaza, the Brooklyn Bridge, Schloss Neu Schwanstein, the New Orleans Superdome, the San Francisco Transamerica Pyramid, Niagara Falls, the New York Fair's Unisphere and the Abu Dhabi Leaning Tower. [Click here to see our simulations](#).
- **Sound Pollution Is Also Not a Consideration for the Solar Reserve® Engineers:** The two 100 megawatt steam turbines will each create 165 decibels of noise which will somehow, almost miraculously, be "contained" in industrial size steel buildings. These remarkably inefficient Rankine cycle engines (nominally 15% efficient) will be driving two huge generators the size of those roaring in the bowels of Hoover Dam. These noisy beasts will also be "soundproofed" inside commercial steel buildings. The redeeming grace, seemingly, is the fact that they will mostly run all through the night.
- **9. The Mythical Jobs Created for Local Residents:** Yes, there may well be some temporary construction and grunt jobs created while they industrialize the valley. But temporary jobs are not real jobs. Temporary jobs typically are structured as independent contractor positions with no deductions and no benefits. Once done, figure it out: there will be intermittent jobs for unskilled window washers to clean the heliostats -- maybe once a year, unless rain does the job for free. A few full-time security guards to staff the entrance guard shack. But this complex will need only a very few highly qualified steam-fitters and engineers to oversee and maintain the operation. The operation will be remotely controlled and operated on a day-to-day basis via computer linkups from Santa Monica, California, using the same few people to do so for all of their industrial complexes from one centralized location.
- **About the Thousands of Purported "Indirect" Jobs:** We've seen grandiose claims by SolarReserve's® very active Public Relations department about thousands of "indirect" jobs created in the communities surrounding their projects. What indirect jobs? The operator of a sandwich wagon to supply food to the single security guard at the gate? A local computer expert to oversee the computer linkup to California? No, these "indirect" jobs bear a remarkable similarity to the millions of jobs claimed to be "saved" by the Obama Administration while unemployment continued to rise unabated.
- **The Looming Property and Business Taxes Scandal:** SolarReserve® is obtaining \$1.5 billion in guarantees from the U.S. government (read American taxpayers) for this project in Saguache County. Using typical and traditional rules of thumb applied by Tax Assessors all over Colorado, this property should receive an approximate [property tax assessment](#) of 30% of the real value -- or [about \\$450 million](#), in this case. At the statutory Colorado property tax rate of 7%, SolarReserve® would therefore be paying [about \\$31.5 million per annum](#) in property taxes.
- **Have Our Sworn Fiduciary Officers, the Saguache County Commissioners Ignored the Law?** However, according to the SolarReserve® Final 1041 Filing, this massive industrial complex with the second and third tallest skyscrapers in Colorado will carry an assessed value of just \$5.5 million (not the appropriate \$450 million) and will pay just \$135 thousand (not \$31.5 million) per year in taxes! If you are harboring the lingering suspicion that this has the stench of political corruption and secret backroom deals with suitcases of money being furtively exchanged swirling around it, you would not be alone.
- **About Our Observations:** We fully expect these comments to be completely ignored, just as our earlier observations about this foolhardy non-green project have been. We have believed from the beginning that "the fix was in". You may then ask why we bother to go through the futile exercise of preparing comments. We are convinced that when the chips

begin to fall after predictable accidents and tragedies, all of the public officials will deny, deny and deny, running away from the problem and claiming no knowledge of the potential hazards posed by this politically connected enterprise.

- **We are Providing a Public Record:** These comments are being entered into the official public record to provide a clear and very defined road map for the scores of class action attorneys who will most certainly descend upon Saguache County after the inevitable happens. Loudly claimed ignorance of the formidable hazards simply will not fly: Our Saguache County Commissioners, their own attorney, nor any of the SolarReserve® executives will be able to pretend they didn't know that unsupportable explosive hazards existed, that extreme damage to the environment was a foreseeable event, that extreme hazard and even extinction of endangered species was clearly foreseeable, that contamination of the unconfined and confined aquifers was probable, etc., etc. Corporations and Public Officials are responsible to their neighbors and must bear the consequences of deliberately dangerous actions, rulings and activities.

John and Erika Keyes
Editors

For more information:
www.FriedCrane.org

FriedCranes.org



Saguache County, Colorado: SolarReserve®'s Final 1041

Editorial: January 5, 2012

FriedCranes.org Scoops the Nation by Presenting the Very First Topographic Map Showing What Will Be the Largest Man-made, Deepest Lake in the World Right Here in Colorado, Stretching into New Mexico!



Although it will be impossible to determine later whether the explosion (equivalent to 6 atomic bombs) was accidentally or purposely detonated, the actual causation will be of little importance compared to the result.

Historians in the future will conclude that it was a small price to pay -- that is, the loss of 8,000 square miles of productive agricultural lands, some 25,000 relatively low income humans residing in 12 towns in the former San Luis Valley as well as a number of wildlife refuges and one relatively small National Park.

Why? Because the resultant fresh water lake will be immortalized forever as the largest in area and by far the deepest man-made lake anywhere in the world.

Oh, naysayers may criticize the methodology and the results, particularly for Colorado, since the explosion would incinerate all vegetation on the sides of the mountain ranges surrounding the former valley, while probably sparing the vegetation to the south. New Mexico will reap greater tourist attraction benefits because the water will be far shallower there, allowing easier construction of marinas and boat ramps.

Here are the pertinent statistics: The man-made lake, which we have named "SolarReserve® Lake" in honor of its bumbling creators, will have a surface area of 8,000 square miles, making the Hoover Dam at 247 square miles and the Chinese Three Gorges Dam at 403 square miles seem puny by comparison. At 30,000 feet deep, it will be by far the deepest fresh water lake in the entire world, making Lake Baikal, in the Siberian region of Russia at only 5,387 feet deep, seem almost like a wading pool!

Yeah, yeah! We know. It ain't happened yet, but it is just a matter of time. SolarReserve® is planning to store 24 million gallons -- 182,000 tons -- of what they euphemistically call "molten salts", but which are actually a highly explosive sodium and potassium nitrate mixture maintained at very high temperatures (Chilean saltpeter and saltpeter, respectively -- think liquid gunpowder) with almost no precautions against accidental or purposeful detonation.

They have optioned a site resting on an earthen membrane comprised of just 480 feet of sand and clay above the exceptionally deep San Luis Valley Confined Aquifer. [Click here to see diagrammatic cross-section prepared by the Colorado State Division of Water Resources.](#) Should an explosion occur, it is certain that the membrane would be destroyed by the downward force of 6 atomic bombs -- hence creating the 8,000 square mile, 30,000 feet deep lake. The resultant 40 mile radius blast zone would indeed incinerate all vegetation on the facing slopes of the Sangre de Cristo, San Juan and La Garita mountain ranges, making them a bit ugly and unattractive to some people. Just saying...

John and Erika Keyes
Editors

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Saguache County, Colorado: SolarReserve®'s Final 1041

Editorial: January 6, 2012

Good News! We Were Wrong! Thousands of New Permanent Jobs to Be Created in Colorado by SolarReserve's® Twin 82 Story Towers Green Energy Project!



For months we have been railing against the SolarReserve® claims that the new "green energy" jobs they would be creating in Saguache County in Southern Colorado would number in the hundreds, with alleged "indirect" jobs numbering into the thousands.

We thought that it was all PR puffery emanating from imaginative folks in Santa Monica, California, but now we have had time to reconsider.

We now know that there really will be not just hundreds, but perhaps even thousands of jobs created for the depressed income county in the San Luis Valley.

You see, we had not taken into consideration the hundreds of thousands of birds -- Great Sandhill Cranes, Snow Geese, Ducks of all descriptions and myriads of other bird varieties -- that would be incinerated (we prefer to say, "Fried") in the extraordinarily high temperature thermal killing fields surrounding SolarReserve's® ugly gray concrete 82 story tall twin towers.

And when you have hundreds of thousands of birds killed, that spells JOBS! And not just any jobs, either. These are the kind of jobs that don't require a college education, or even a high school diploma, for that matter!

It is the perfect solution to the western slope unemployment problem - low skill, but very high paying jobs that anyone from young to old will be able to hold down.

Why very high paying? Jobs that no one else wants to do or will do simply command a premium wage and premium benefits

Of course, if folks find the stench of burnt feathers and dead, rotting flesh offensive, this may not be the kind of job they really want. But in these hard times, any job is a job.





These heaps of birds can not simply be buried, to rot harmlessly away in their landfill tombs.

Nopers! Those mounds of smelly bodies will have to be burned, instead, to avoid polluting the San Luis Valley Unconfined Aquifer.

Actually, it will be an added bonus to SolarReserve® profits, since they will be obliged to build a corpse incinerator, perhaps on some unused portion of their 10 square mile site, to which their stinking employees -- but really well-paid, remember -- can cart the dead bird bodies.

Burning all the rotting flesh carries with it the incredible benefit of creating heat which can be used to generate even more electricity that can't be delivered anywhere, because Xcel Energy® has announced that it isn't adding transmission capability for at least seven years.

Thus, the electricity can not be delivered to anyone, but it will still be "green energy", so it doesn't have to be practical, as long as the American Taxpayer is on the hook.

And one additional tower -- this one belching smoke -- will scarcely be noticeable next to its behemoth brothers.

At least we can say very accurately, this one really is for the birds!

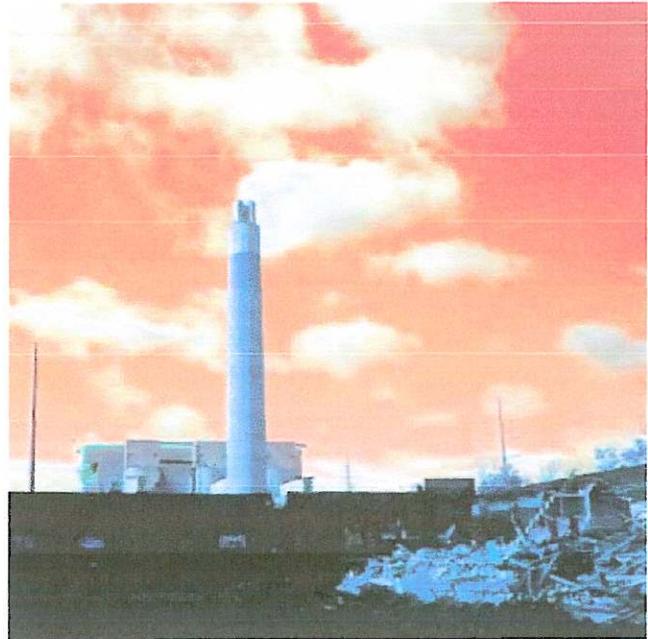
But not all of the jobs created will be the somewhat nasty and repugnant ones described above, despite the images conjured up in our imagination as we show you on the left.

See, SolarReserve® was right about "indirect" jobs, too! We see many local cottage industry companies arising to fill the need for respirators, hazmat suits, nitrile gloves, shovels and tongs to pick up dead birds, yellow hazmat buckets, wheelbarrows, etc.

A few boutique perfumeries could do a land office business supplying not just perfumes and colognes, but a variety of ultra-high-power deodorant concoctions.

We foresee local entrepreneurial restaurant owners heightening their dinner crowds simply by adding on-site shower rooms where local workers can remove their odiferous stench before joining the dining throng.

You might suspect that local waste disposal companies would be able to capitalize on this boom-town atmosphere, cashing in the the monumental job of disposing of the hundreds of thousands of bird corpses. Unfortunately, that will probably not happen.



John and Erika Keyes
Editors

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Saguache County, Colorado: SolarReserve®'s Final 1041

Response: January 7, 2012 (Printed in the *Alamosa Valley Courier*)

Our Response to CEO Kevin Smith of SolarReserve's® Response to Our Letter to the Editor in the *Valley Courier*

We are extraordinarily pleased to respond to the SolarReserve® Response of January 5, 2012 In the *Valley Courier* to our Letter to the Editor dated December 23,2011.

1. Mr. Smith categorically states that the saltpeter being explosive is FALSE (emphasis his). Well, check it for yourself at http://en.wikipedia.org/wiki/Potassium_nitrate Let us quote from Wikipedia: "Gunpowder, also known since in the late 19th century as black powder, was the first chemical explosive and the only one known until the mid 1800s. It is a mixture of sulfur, charcoal, and potassium nitrate (saltpetre) - with the sulfur and charcoal acting as fuels, while the saltpeter works as an oxidizer." Similar oxidizers known to chemists everywhere are potassium nitrate and ammonium nitrate. Farmers use the latter locally to fertilize their fields. Somehow, Timothy McVeigh managed to make 2-½ tons of ammonium nitrate EXPLODE (Emphasis ours) in bringing down the Alfred P. Murrah building in Oklahoma City. Was Tim McVeigh smarter than SolarReserve's® engineers? Mr. Smith's corporation's Final 1041 Application does allege that the salts are non-explosive. Unfortunately, the laws of physics and chemistry are not altered by allegation. A bit of carbon and an RPG fired by a terrorist or a tracer fired by a hunter could indeed detonate a 6 million gallon unprotected tank of a mixture of sodium and potassium nitrate.
2. His allegation that 182,000 tons of this mixture are "completely safe" is true, so long as they are not DETONATED. You can throw a stick of dynamite in the fire and it will burn -- guess that makes it "completely safe" so long as you don't insert a blasting cap and DETONATE it.
3. News reports we rely upon stated that SolarReserve® received a loan guarantee on the last day that the former DOE chief had his job. Maybe they were untrue. If so, we were wrong. However, it is dead certain that SolarReserve® received a \$737 million guarantee for the project half the size (only one tower) in Tonapah, Nevada. What is 2 x 737? We get \$1.474 Billion. Aw! We rounded it up to \$1.5 Billion. For shame!
4. We do not doubt that SolarReserve's® professional economists came up with a total value for the entire project of \$6.5 million (some 226 times less than it cost?). At 30% of real value, the Saguache Assessor would ASSESS the property for about \$1.95 million. Then, at the Colorado statutory rate of 7% of assessed valuation property taxes, we arrive at the \$135,000 annual property taxes the "professional economist" determined for the Final 1041. Wow! How many Saguache County taxpayers are able to hire a "professional economist" to determine that their taxes should only be 4/10ths of 1% of what they are REALLY?
5. Mr. Smith did find an error that we have subsequently corrected on the www.friedcranes.org website. Bedrock is not 4,200 feet below the site. According to the [Colorado State Department of Water Resources](http://www.colorado.gov/pacific/dwr), bedrock is as much as 30,000 feet below the site. If Mr. Smith has a proprietary secret for erecting skyscrapers without real caissons to bedrock, instead floating them in 80 feet of water-saturated sand (can you say "quicksand"?) at the site, he should be selling it to contractors around the world who still believe you have to support skyscrapers (82 stories) with caissons to bedrock.
6. Mr. Smith states that "359 cranes flying over the project" is FALSE. Yes, here is the exact statement from his Final 1041: "During surveys, 1,306 sandhill cranes (maximum 350 in one observation more than 2 miles from the Project boundary) were observed foraging, roosting, or in flight. Sandhill cranes were not found to roost or forage within the Project boundary and most observations occurred in a matrix of winter wheat stubble and rangeland to the northwest of the Project boundary." [Click here for the actual study](#). Again, wow! Any farmer or local driving along CR G, CR 59 or CR 53 during the spring and fall migrations knows differently. Attendees at the Monte Vista Crane Festival probably have seen more.
7. 50 full-time year-round jobs. Use your own logic -- how many high pressure steam-fitters, 100 mw turbine operators and 100 mw generator mechanics do you know residing in Saguache County? Being committed to hiring locally ain't gonna get it done, sir.
8. That the salts do boil/decompose at 710 °F is TRUE. We refer you again to Wikipedia. [Sodium nitrate boils/decomposes at 308 °C](http://en.wikipedia.org/wiki/Sodium_nitrate) -- if you have internet, go to http://en.wikipedia.org/wiki/Sodium_nitrate to check it for yourself. [Potassium nitrate boils/decomposes at 400 °C](http://en.wikipedia.org/wiki/Potassium_nitrate) -- http://en.wikipedia.org/wiki/Potassium_nitrate to check it for yourself. Adjusting for our altitude of 7,650 feet and converting to Fahrenheit, we get 710 °F. Saying it ain't so doesn't alter the chemical facts. Sorry.
9. When birds can fly through thermal fields averaging 750 °F with impunity, because SolarReserve® has worked with "appropriate agencies to develop an Avian and Bat Protection Plan" as Mr. Smith claims, we will doff our hats and say,

"Boy, is youse guys good!"

In fairness to Mr. Smith, he is the CEO of a giant corporation and has to rely upon reports he receives from various paid underlings who may or may not be correct in their assessments. No one has ever built a system like that proposed for Saguache County. Let's repeat -- it ain't been done yet. So, while we applaud his grandiose dreams, we do wish he would check things out more carefully in the future. His corporation has an alliance with a huge Chinese photovoltaic manufacturer. Those non-polluting panels would be far more welcome in our pristine valley adjacent to the Great Sand Dunes National Park.

John and Erika Keyes
Editors

For more information:
www.FriedCrane.org

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Saguache County, Colorado: SolarReserve®'s Final 1041

Editorial: January 10, 2012

Lake SolarReserve® Laps Along Shore of Former Town of Crestone and the Baca in Summer with Beautiful Rainbow Reflecting Serenely in the Waters

The San Luis Valley has always been renowned for its pristine beauty. But we are forced to admit that turning it into the largest and deepest man-made lake in the world would actually heighten that magnificent panorama.

We had originally viewed the possibility of a horrendous accidental or purposeful explosion at the infamous SolarReserve® massive industrial complex sprawling over 10 square miles of desecrated agricultural ground with great alarm.

But that will all be behind us after the 182 kiloton explosion, should it occur. In the simulated photo at right taken from the former Solar Reserve® complex toward Crestone, you can see nature heals itself with even more beauty.



At the right is a simulation prepared looking to the west toward the San Juan and La Garita Mountain Ranges taken from the place where the massive SolarReserve® complex would lie resting at the bottom of the 30,000 foot depths.

We can even envision salvage operations being mounted, similar to those exploring the Titanic, to recover equipment shards and perhaps some ugly tower artifacts.

Although the National Park, above, and the mountains at right would only be accessible by boat or a huge motor launch, such a lake voyage would be enjoyable in and of itself. It would originate, perhaps, from the huge array of boat ramps and piers at the newly constructed marina at Rancho de Taos, New Mexico.



Even without God's magnificent rainbow painted so majestically against the backdrop of the town as shown above, SolarReserve® Lake would heighten and almost inconceivably amplify the spiritual beauty and uplifting intake of breath involuntarily occurring at one's arrival at the Great Sand Dunes National Park, as can be seen in our computer simulation at the left.



And Here Is Our Satellite Map of the New SolarReserve® Lake Measuring 8,200 Square Miles by 30,000 Feet Deep – The Largest Man-made Lake in the World!



Notice that at least South Fork would still exist after the big boom, and the upper reaches of the Great Sand Dunes National Park would still be above water, as well.

Lake-front property on the upper slopes of the Sangres and the San Juans could well be removed from Rio Grande National Forest and sold to the highest bidders to help pay for the new roads and highways that would be necessitated.

The costs for stocking the huge lake with freshwater sharks, and other species known to thrive in Lake Baikal in Russia, could also be underwritten by permits for deep lake fishing issued to the myriad of Gulf of Mexico fishermen impoverished by the slow response of the Obama administration in compensating them for their losses due to the BP oil spill. Perhaps a deal could be worked out with Scotland to transplant the Loch Ness Monster to increase tourism even more!

Of course, SolarReserve® did promise hundreds of jobs and thousands of indirect jobs would be created, but we foresee not just thousands, but hundreds of thousands of new jobs, due to the creation of Lake Solar Reserve®.

Just think of the new hotels and bed and breakfast establishments alone that would need to be built around the marina in New Mexico. New yachts and huge ferries would revitalize the east coast boat builders.

Then, new airports would be needed in Northern New Mexico to accommodate the hordes of world tourists flocking to the southern end of Lake SolarReserve® to marvel at its awe-inspiring size and beauty.

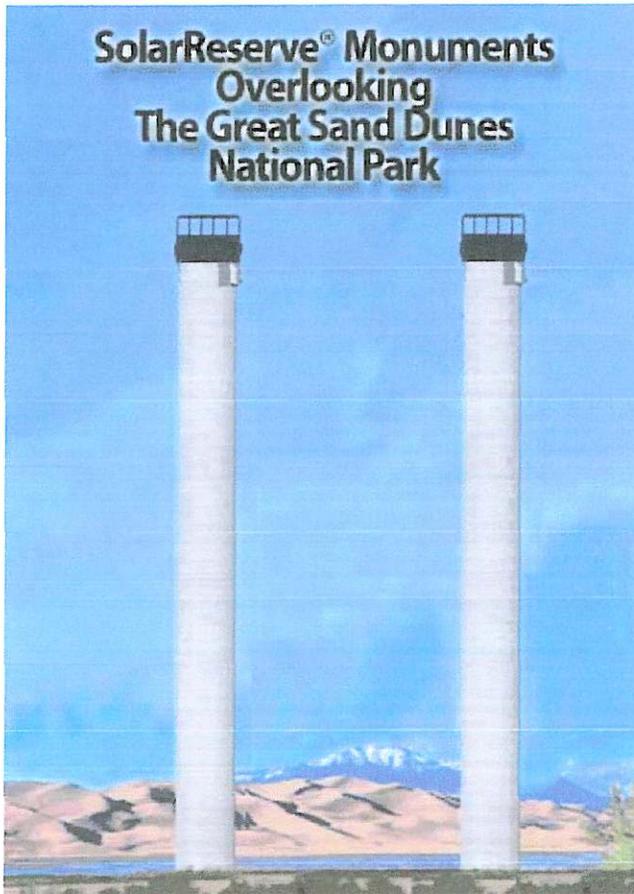
John and Erika Keyes
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Saguache County, Colorado: SolarReserve®'s Final 1041

Editorial: January 14, 2012

Nah! Nah! Nah! Nah! We Told You So! We Told You So! All Those "Local" Jobs SolarReserve® Has Been Talking About Are Quite Imaginary! Say Hello to PIC Group, Inc.!



When you are past 75 years of age, people shake their heads and smile and murmur, "They're in their second childhood!" We qualify, so please be patient and indulge us as we jeer in a totally childish way!

We have been endlessly boring everyone with our observations that really high-tech jobs were well beyond the capabilities of our present Saguache labor pool.

PIC Group, Inc announced Thursday, January 12, that it will be operating and managing SolarReserve's® affiliate Tonopah Solar Energy LLC taxpayer-guaranteed Crescent Dunes Project in Tonopah, Nevada. To quote from PIC's press release, "PIC will provide full care, custody and control O&M services to the Crescent Dunes Solar Energy Plant."

A world-renowned firm specializing in turnkey operation and maintenance of industrial-scale steam turbine installations, PIC is scheduled to initiate operations later this year, with complete operation in early 2013. Originally called "Power Industry Consultants" when founded 24 years ago, they now go by the simpler PIC Group, Inc. or just PIC. (Please do not refer to them as WaterPIC after the inevitable happens here in our county!) You can read their press release here: [PIC to Operate World's First Full Scale Molten Salt Solar Power Tower.](#)

Why Not Call SolarReserve®, Building Their Ugly 82 Story Towers, by a New Name: "The Pontius Pilate Solar LLC"

We are guessing that the liability issues that we have been pointing out for months are too great for SolarReserve's® attorneys to tolerate.

It has not escaped our notice that the Santa Monica based limited liability company has formed an "affiliate LLC" (Tonopah Solar Energy, LLC) in Nevada to "own" the great ugly behemoth industrial explosions-in-waiting. Then, one might assume that liability is further removed by simply finding yet a third, so-called "arms-length" patsy corporation to unknowingly assume responsibility for the risk, while SolarReserve® *"washes its hands of the whole stinkin' mess"* and goes on to do another project.

And if the Patsy Involved Corporation goes broke, SolarReserve® ain't responsible. Right? Well, we aren't lawyers, but we suspect that this is a case where transparency might actually be present, for a change.

It has been our experience that class action lawyers are really quite adept at spotting subterfuge, if it is present, and even going so far as to penetrate the corporate veil and sue the officers of all of the companies. Means lots more money for them and their clients. They might even follow the paper trail of multiple warnings about incomprehensibly large hazards.

In the event of explosive events or catastrophic environmental damage, an up-and-coming politically ambitious U.S. Attorney might even see criminal actions and act accordingly. Not to worry, guys -- we hear Leavenworth ain't that bad. Just

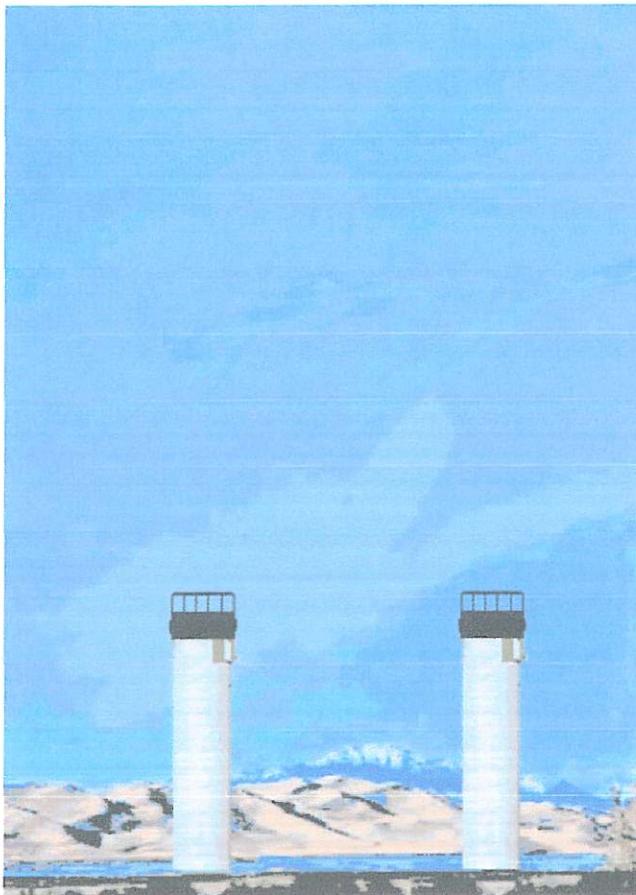
saying...

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Kevin Smith, CEO of SolarReserve® Stated in Jan. 5 Letter to the [Alamosa Valley Courier](#) That Only "50 Foot to 70 Foot Pilings" Are Needed to Support 82 Story Concrete Towers!



Imagine SolarReserve's® ugly gray skyscrapers descending majestically through the San Luis Valley Unconfined Aquifer, the Blue Clay Layer and then plunging from sight forever into the 30,000 foot depths of the Confined Aquifer!

We estimate the weight of each of these ponderous 82 story tall slip-formed ugly gray towers to be at least 42,000 tons.

Let us quote SolarReserve's® CEO Kevin Smith in his letter to the editor on January 5, 2012 in the [Alamosa Valley Courier](#), "The anticipated support pilings will be placed at a depth of 50 to 70 feet." He really said pilings! Instead of caissons down to bedrock as prudent engineering would require. It does seem foolhardy at best.

Quoting from SolarReserve's® own commissioned geotechnical survey prepared by Geotechnical and Environmental Sciences Consultants, Ninyo & Moore of Greenwood Village, Colorado for the Final 1041, entitled [GeotechnicalFeasibilityStudy.pdf](#) which may be downloaded here, we find this statement: "The site is underlain by sediments to depths on the order of thousands of feet. The sediments in the upper approximately 130 feet consist of intermittent layers of sand, gravel, and clay underlain by a substantial layer of blue clay that may be on the order of several hundred feet thick. The bearing capacity provided by these unconsolidated settlements is expected to be relatively low. Foundation designs incorporating low end-bearing capacities and relying mainly on side friction should be evaluated for their constructability and economic suitability." (Emphasis ours)

We found data at the Department of Engineering Design and Mathematics of the University of the West of England in Bristol concerning load bearing capacities of pilings. The reader, CEO Kevin Smith and SolarReserve's® engineers are referred to their comprehensive study at [Bearing Capacities of Piles in Non-Cohesive Soil](#).

Let us summarize a bit for folks who don't have internet: the presumed bearing capacity of medium dense sand without water is 100 to 300 kN/m², while water-bearing sand is nominally only about 50% of these values, but can see accelerated punch through, once the semi-viscous surrounding membrane begins an accelerating slip. Soft clays and silts like the blue clay layer actually have even less bearing capacity at <75 kN/m² and a further reduction of 50% of that value when water-bearing. If you don't calculate in kilonewtons per square meter, this would be 74 lb/ft²

Under worst conditions, each 8 foot diameter piling would support about 65 tons without any allowance for a safety factor. Are they planning to sink 650 pilings for each tower, plus more for a safety factor? The problem with that is the circumference of the tower ain't large enough to accommodate even close to that many. Dam!

So we, Ninyo & Moore and the University of West of England all disagree with CEO Kevin Smith's assertion that

mere 50 to 70 foot pilings will suffice, when every other skyscraper in the world requires multiple caissons into bedrock.

The 175' Diameter, 8 Story Tall Tanks - All Four of Them -- Are Proposed to Be Buried Deep Enough to Allow Creation of a Retention Depression Big Enough to Hold All the Contents!

Worse yet, the four massive 6 million gallon tanks housing the explosive potassium nitrate and sodium nitrate at excessively elevated temperatures will weigh 45,500 tons each, and according to the Final 1041, these will be buried in the water-bearing sandy soil, as well. Apparently with no provisions to prevent leaching of the poisonous chemicals into the Unconfined Aquifer should a spill occur. [You can read the very disingenuous report from the SolarReserve® Final 1041 here.](#)

Much is made in that report about the alleged safety of these chemicals and the fact that there will be no reducing agents present at the site. You should visit the [Organic Chemistry Portal](#) to read an extensive list of reducing agents. Then ask yourself if Carbon, Chromium, Hydrogen, Iron, Nickel, Potassium, Sodium or Zinc might be present somewhere on the site to serve as a reducer. We do agree that carrots probably won't be present unless in an imaginary worker's lunchbox.

Their report makes this misleading statement: "When brought into contact with water or with fuels, such as gasoline or diesel fuel, the salts are non-reactive." True as far as it goes. Tim McVeigh was able to safely drive his rented Ryder® Truck to Oklahoma City with the nitrate salts and diesel fuel already mixed. Stating that the salts and fuel are non-reactive kinda misses the whole point of bomb building, doesn't it?

The rapidly oxidizing "molten salts" **will** explode if properly detonated. We feel no need to further aid potential terrorists by giving the exact method for doing so. But we can say without hesitation, "It just ain't rocket science, Bubba!"

However, from reading the Final 1041, it is clear that little thought has been given to the "rapid oxidizing" characteristics of the salts, particularly at high temperatures in tanks open to and venting into our pristine valley atmosphere and the myriad associated piping. "Oxidizing" will result in rust or other corrosion, similar to -- but much worse than -- that of salt water. One of the engineers might want to investigate that problem with a naval expert used to dealing with corrosive environments.

We want to quote from page 3 of Rolled Alloys® treatise "Oxidation", [which may be downloaded here](#). "Of great concern are environments that promote the destruction of the (thin chromium oxide) protective layer by some chemical reaction. For example, we know of one case where minute amounts of potassium nitrate/nitrite austempering salts were present on fixturing used in a carburizing atmosphere. The salts attacked the protective oxide coating, so that a normally carburization resistant alloy carburized very quickly and uniformly." Just saying...

John and Erika Keyes
Editors

For more information:
www.FriedCrane.org