

# Typical Questions from Citizens & Landowners Regarding Uranium Mining in Texas\* and Typical Responses by Uranium Companies in Texas\*\*

Assembled by



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## 1. (Question Asked by Citizen): How do you protect the aquifer from being contaminated with heavy metals?

(Response Provided by the Mining Company): First, let us define the location of the uranium. Some water is produced from this horizon, but drinking water wells are located at a considerable distance from the uranium ore, both horizontally and vertically. The depth varies from 450 feet to 650 feet below the surface, depending on the thickness of the over-lying strata. The uranium ore body and aquifer *already* naturally have heavy minerals present, the foremost of which is uranium.

The proposed in situ recovery (ISR) operations are designed to isolate the operational portion of the ore zone from any surrounding zones that contain and produce potable water. This necessity to confine the operations to the uranium zone is a primary requirement by the regulatory authorities before a company is allowed to mine.

Mining companies must determine the baseline water quality and the level of uranium and other elements that are currently present in the strata in the mine area before any mining is begun; that's the express purpose of the monitoring wells drilled in the area of mining. Other metals may be associated with the uranium and testing of the ore zone will tell us which metals are present and in what quantity they may be solubilized under oxidizing conditions. The deposit is surrounded by a ring of monitoring wells that will detect any excursions of mining fluids before they migrate any significant distance to become a major problem. At the end of mining, the company is required to return ground-water quality to a level consistent with the quality present for the ground water use prior to mining. The prior conditions are represented by the sampling of the water wells and monitoring wells installed and completed before mining.

## 2. When you start the in-situ leaching, is it still possible to live on the properties that are involved in this process?

**RESPONSE:** Absolutely yes. The areas surrounding the permit areas will remain safe for all activities and residents, just as they are today. The suspension of any activities by the landowner is *only* within the operating area, where the drilling rigs, vehicles, wells, monitoring equipment and backhoes are treated as industrial equipment and restricted to qualified personnel only for the same safety reasons as any industrial site. ISR production also consists

of a well field, which contains numerous water wells usually spaced at approximately 100 feet apart or closer. These wells are constructed from polyvinyl chloride (PVC) and livestock can damage the well head that is exposed above the surface. In-situ well fields exist in harmony with human activities where operations surround or are near residences. The fluids produced from underground are dilute and contain only a few parts per million of uranium in solution.



Typical Drilling & Coring of Uranium Exploration Program

**3. How much water do you need for the in-situ leaching process? Where do plan to obtain this water?**

**RESPONSE:** The water that is used in the mining operations is derived from the pore space in the rock that contains the uranium ore and it is continually re-circulated during the operation. Assuming a 2,000 gallons per minute flow rate, a one percent bleed to an evaporation pond or holding tank, which is required by regulation, would result in 20 gallons per minute being consumed.

**4. Can you please explain to us the difference between low-level radioactive waste materials and transuranics? How are these waste materials handled, and where are they legally disposed of?**

**RESPONSE:** Low-level and transuranics are definitions for wastes that are products of a nuclear reactor. Transuranics are definitely not a product of uranium mining. Any wastes generated from ISR mining are called by-product material, and are disposed of only in an NRC-commercial disposal site.

**5. In the unlikely event of a spill on our property, what federally licensed and bonded company is on retainer with the mining company to clean up the environment; how long will it take and what reporting, monitoring and site-safety verification process and guidelines do you follow to assure property/homeowners that their home is safe enough to inhabit?**

**RESPONSE:** Spills of ore or resin beads containing uranium during mining in or around the plant are very unlikely, but in the case of a spill, such spills still pose no danger to human health or the environment. The fluids volumes would be low and the associated radioactivity would also be relatively low. For example, the radioactivity of uranium in one gram of uranium ore (assume 200 ppm) is 134 pCi (picocurie) and that of pure natural uranium is 670,000 pCi (picocurie). The latter is close to the radiation emitted by a self-luminous watch dial (up to 500,000 pCi). During transport from in-situ well fields, natural uranium will be tightly bound by ion-exchange bonds to resin beads, presenting no danger to human health. Any such spills would be tested and the soil would be excavated, placed in 55-gallon drums and stored until closure or sent to a licensed disposal site. It is unnecessary to have an environmental response firm on retainer as a condition of permitting. The radioactivity levels dealt with here are nowhere close to those present within a nuclear power plant.

**6. If the leach mining that you propose is not a threat to our environment, then why do we have to remove our livestock from the property, suspend youth activities and monitor our drinking water supplies for the duration of your mining operation on our property?**

**RESPONSE:** The areas surrounding the permit areas will remain safe for all activities and residents, just as they are today. The suspension of any activities by the landowner is *only* within the operating area, where the drilling rigs, vehicles, wells, monitoring equipment and backhoes are treated as industrial equipment and restricted to qualified personnel only for the safety reasons just like any industrial site. The Texas Department of Public Health and the Texas Commission of Environmental Quality (TCEQ) will attest to the fact that areas adjacent to the operating permit areas will be safe for all activity, just as it is today.

As required by law, all water supplies surrounding a site must be tested for the ground-water quality periodically so the public can be confident that their safety is not compromised. With regular testing, the population can rest assured that their drinking water is not affected.

**7. We are now aware that there is a significant risk of environmental contamination to the water and soil from in-situ leach mining, and yet you assure us that there is not a risk of airborne radioactive contamination. What technology does the company plan to use to monitor air quality, how long has this technology been in use, and what company will be making these tests? How many monitoring stations will be in place for each property owner: spacing and locations? Will these stations continually track air quality for excursions of radon and radon progeny? Specifically lead-210 and polonium-210. What branch of the federal government oversees the test results?**

**RESPONSE:** These questions are based on erroneous assumptions and are unnecessarily inflammatory. There are virtually no risks of environmental contamination to the ground water, soil or air from using ISR methods to mine uranium. The technology has been in existence for over 30 years with no deleterious effects on human health and the environment ever reported. A number stationary air-monitoring stations will be set up at the boundary permit area of the plant to measure levels of radon and other parameters as specified by the Texas Department of Health (TDH) and/or TCEQ, and to assure the public that safe levels of air quality are maintained. Two will monitor only particles less than 10 microns in diameter, and the remaining stations will test all particle sizes. The location and quantity of the stations is determined in the permitting process and will be approved by the TDH and/or TCEQ. The technology used is standard for air monitoring.

**8. To whom do you submit ground water, soil, and air quality reports during your work on our property, and what radiation levels/parameters are you required to follow?**

**RESPONSE:** The company submits all data to the TDH, TCEQ and / or Texas Railroad Commission (TRRC), along with the U.S. Environmental Protection Agency. As an agreement state, these agencies oversee the Nuclear Regulatory Commission's limit on radiation exposure for any member of the public from a uranium extraction facility at 25 millirems per year with a condition that exposure be as low as reasonably possible. This limit is one-sixteenth of the average amount of radiation (400 millirems) that a Texas citizen receives each year from natural sources alone.

**9. Please reference the specific environmental guidelines that you are required to follow, and provide us with a copy.**

**RESPONSE:** The Company will gather environmental data that will support its permit applications to federal, state and local regulatory agencies. The specific guidelines are part of the permits that will be applied for upon the completion of testing for background data and mine planning and, ultimately, engineering design. At the time that the regulatory agencies grant permits and licenses, the agencies will issue site-specific conditions that the Company is required to follow. These documents will be made available to the public, if interested. Until the agencies have the application and data to review, the Company will not establish the site-specific requirements. However, the standards that the company must meet before a permit is granted are available.

The specific rules and regulations for ISR mining (Class III injection wells) are:

TCEQ - 30TAC 331 – Underground Injection Control, Subchapters A, C, E, F, and G  
([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.ViewTAC?tac\\_view=4&ti=30&pt=1&ch=331](http://info.sos.state.tx.us/pls/pub/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=331)) and  
[http://www.tceq.state.tx.us/permitting/waste\\_permits/uic\\_permits/UIC\\_Guidance\\_Class\\_3.html](http://www.tceq.state.tx.us/permitting/waste_permits/uic_permits/UIC_Guidance_Class_3.html)

TDH – <http://www.dshs.state.tx.us/radiation/>

TRRC – [http://info.sos.state.tx.us/pls/pub/readtac\\$ext.ViewTAC?tac\\_view=5&ti=16&pt=1&ch=11&sch=C](http://info.sos.state.tx.us/pls/pub/readtac$ext.ViewTAC?tac_view=5&ti=16&pt=1&ch=11&sch=C)

U.S. EPA - <http://www.epa.gov/radiation/docs/tenorm/402-r-05-009.pdf>

**10. How much money will the Company put in escrow for the health care of local community members who are exposed to contaminated ground water, soil and air? What is the life of this escrow account and who will be the facilitator?**

**RESPONSE:** This question appears to address how financial surety is established and which agency is responsible for determining the amount and where the money is to be held. If that is the case, the answer is as follows:

The TDH, TCEQ, and the U.S. EPA all collaborate to establish the level of financial surety. This money is held in an Escrow account, which is managed and controlled by either the State or Federal Government for the duration of the operation. The Company secures surety bonds for its drilling activities as required by the state agencies, so that any costs of restoration and plugging of wells and removal of surface facilities are guaranteed. The bonds will stay in place until the restoration work is completed and approved. This type of "insurance" will guarantee the healthy future of the site for generations.

**11. To what market is the uranium mined by the Company sold?**

**RESPONSE:** Due to high demand, a deficit of domestic uranium supplies, and concerns about the security of foreign supplies, the uranium mined in the United States will stay in the United States for nuclear power generation.

U.S. utilities have the largest demand for uranium in the world. Our nation obtains 20-percent of its electricity from nuclear power and consumes approximately 55 million pounds of uranium annually. Only 3 million pounds presently are produced from *domestic* uranium reserves, with the other 50+ million pounds coming from foreign markets such as Kazakhstan, Australia and Canada. Nuclear power generators simply prefer to buy uranium produced in the U.S., and the Company can provide them an adequate and secure supply.

To expand further, the Company notes that many adversarial groups concerned with global warming have asserted their *support* for nuclear power, as the leading method of reasonably-priced energy production without carbon dioxide emissions. Uranium is the one element that can help meet growing energy demands while not contributing to carbon loading in the atmosphere, as fossil fuels do.

**12. In some documentation the Company refers to the uranium extraction process as in-situ leach and other in-situ recovery, why the difference in verbiage?**

**RESPONSE:** Leaching is an old term once implying heap leaching above ground using strong chemicals, a process used in gold recovery. Because In-Situ Recovery (ISR) does not use strong chemicals, but rather oxygen and sodium bicarbonate, ISR has become the common name now used to describe the process of recovering uranium through water wells, using only oxygen as a lixiviant with the native ground water.

**13. The Company continually calls the water being re-injected into the aquifer as “treated”. What is your definition of this treatment process? What will be added to the water during this treatment and re-injection of the water into the aquifer?**

**RESPONSE:** “Treated” during operation means adding oxygen and sodium bicarbonate. During the restoration process, the word “treated” means removal of any ion build-up in the water during mining. Some of the metals are re-circulated with the injection solution and not removed (or precipitated) until the end of the recovery process at the ground-water restoration phase. These precipitated metals, such as iron, sulfur, selenium, molybdenum and others would be packaged and disposed of at a licensed facility.

**14. Many in-situ leaching sites use hydrochloric acid in the process of uranium mining. The Company states they will use oxygenated water with sodium bicarbonate. Have you ever and do you plan to at some point, use hydrochloric acid on this or other projects? Even if your yield of uranium is not quite what you expect from just this solution?**

**RESPONSE:** In the history of ISR uranium mining in the United States, only Nine Mile Lake in Wyoming has had a test of acid production. Some mines have previously used hydrochloric acid in very small amounts to clean well screens that became plugged with calcium. Today there are

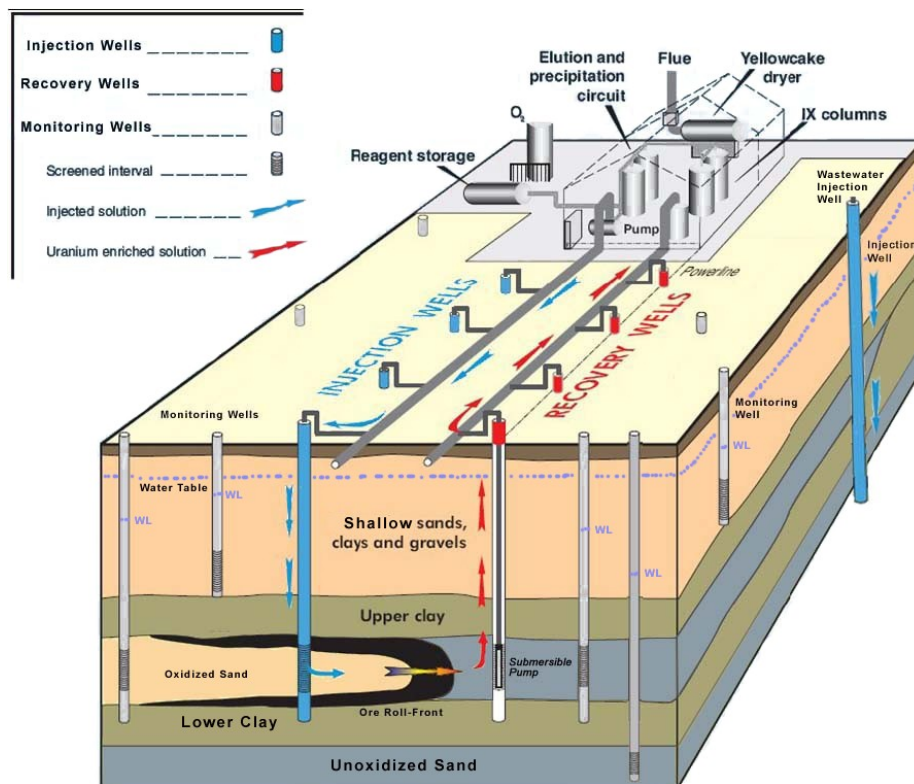
less harsh methods to clean the well screens. The Company does not plan or intend to use any acid recovery solutions at this operation.

### 15. What is your projected drilling date?

**RESPONSE:** The Company plans to begin drilling confirmation of the known ore zone and monitoring wells, as required by its exploratory drilling permit, during late 2007 or early 2008. Well field drilling will begin after all mining permits are in place. Permit applications will be submitted in the latter part of 2008 or early 2009.

### 16. How many uranium production wells will there be?

**RESPONSE:** The number of wells will depend on the results of the final geologic study. However, in the area of the ore, wells will probably be spaced between 75 and 100 feet apart. In the ISR process, wells need to be closely spaced in order to extract the uranium, due to its tendency to precipitate in the subsurface environment over longer distances.



After Heathgate Resources Pty Ltd

Typical Uranium Production Site, Showing Ore Zone, Fluid Flow, Local Geology, Monitoring Well Sampling Zones, Water Table and Ground-Water Levels, and Surface Equipment and Plant Site, if Located Onsite.

### 16. How deep will the wells be?

**RESPONSE:** The wells will be drilled through the ore horizon. The depth varies from 450 to 650 feet below the surface, depending on the thickness of the over-lying strata. New discoveries

may encounter deeper ore zones. Monitoring wells will be installed above, within, and below the uranium production zones.

**18. Where, specifically, is the planned location of these monitoring wells?**

**RESPONSE:** They will be sited on the surface above the ore bodies. Specific surface locations will be determined, along with the final number of wells, following the final geologic study that will be reviewed during the public permitting processes.

**19. What specific Homeland Security Rules must you follow to protect surrounding communities from terrorist activity?**

**RESPONSE:** The Company knows of no U.S. Department of Homeland Security rules that apply to its operation. Naturally occurring uranium in its ore state poses little danger to the public, and ore would be incredibly difficult to use to create a national security issue. Uranium is found in small quantities everywhere, and in perspective, poses less danger to the public than a standard gasoline filling station or surface-exposed propane tank for a terrorist attack. Any other security measures required by the regulatory authorities will be addressed accordingly in our permit applications.

**20. Why would some mining people continue to say that they have never heard of any aquifers being contaminated from in-situ leaching processes of uranium extraction when there are MANY documented cases? Kingsville Dome is one. Just look at the links on our website (nunnglow.com), you'll see many other examples from around the world. A 2007 NRC report verifies these contaminated water supplies.**

**RESPONSE:** The fact is no drinking-water supplies have ever been contaminated by an ISR recovery project in the U.S. The in-ground zones where uranium occurs contain water that is rich in uranium and because of its mineral production capability, is not often appropriate as a source of drinking water. The examples referenced are unfounded, and are used as scare tactics for those who oppose nuclear power development. There are many successfully restored and reclaimed ISR sites.

The confusion indicated by local landowners that ISR contaminates the drinking-water supply comes from the fact that most uranium ore deposits to be developed by ISR methods occur within drinking-water aquifers. While most of the water in the aquifer is of drinking-water quality, the ground water in the immediate vicinity of the uranium deposit is not, precisely because of the presence of the uranium deposit. People who have been drinking from a water well that "suddenly has become contaminated" are often drinking water from that part of the aquifer containing the uranium, and the well had never been tested previously. This is why testing of all nearby wells prior to mining is so important.

The NRC report referenced, entitled "NUREG/CR6870: Consideration of Geochemical Issues in Groundwater Restoration at Uranium In-situ Leach Mining Facilities" was published in January 2007. The report does not verify contaminated water supplies, which are defined as a system that supplies drinking water for human consumption. The report does indicate a tendency for ISR operations to contaminate water at the mine site, where the ground water is not and never will be a drinking water supply. The focus and intent of the report is to offer guidance for the mining industry to calculate the amount of water that is required to restore water at the mine site. The report states:

“This report discusses the in-situ leach mining process, common restoration methods, historical information on in-situ leach mine restoration, and analytical techniques that may be used for estimating the future costs for restoring these sites.”

Clearly, the report is not emphasizing ground-water contamination, but rather acts as a guide to the mining industry on various methods of restoration and means of calculating the cost of restoration. Further, many of the examples referenced on your Web site (nunnglow.com) show in-situ operations in foreign countries, which are irrelevant to the U.S. industry and are regulated by a different standard. Many of these examples have commonly used stronger leaching agents, such as sulfuric acid, which is more reactive and leaches out much more of the metals and salts, and takes longer to restore. The Company neither intends nor plans to use any acidic recovery solution.

**21. Do you know EXACTLY where the aquifers are in relation to the wells the Company will be drilling and using as injection and extraction wells?**

**RESPONSE:** Many state laws allow for that information to remain proprietary and confidential, because of the number of the other uranium companies and Company competitors in the area. Previous drilling by precisely located the deposits when exploration drilling was done. The Company will provide the exact locations and other details in its regulatory permit applications, which will be open to public inspection.

**22. Are you familiar with which aquifers may be affected by any leakage or spillage? Please name them.**

**RESPONSE:** ISR operations will not and cannot negatively affect any drinking water aquifers. The purpose of regulatory review and receipt of permits is to assure the public that operations will not negatively impact human health or the environment. The deposit will be surrounded by a ring of monitoring wells to determine if any excursions occur.

**23. Where will the drying and packaging of yellow cake occur? Uranium mills or onsite?**

**RESPONSE:** The uranium the Company extracts is *not* yellowcake, nor will it *ever* be processed at the site into yellowcake. Resin-loading towers, oxygen and carbon dioxide facilities will be present that make up the first stage in uranium recovery from the fluids produced. Resin beads loaded with uranium will be transported from the in-situ mining sites to a central processing plant located off-site. There, the uranium is stripped from the loaded resin, precipitated and dried, yielding uranium oxide ( $U_3O_8$ ) which often has a rich yellow color called "yellowcake". The resin beads are returned to the ISR site and reused in the recovery process. This process of ion exchange is very similar to that involved in a typical domestic water-softening unit used throughout the rural U.S. to treat hard ground water that tends to stain bowls and impacts the use of soap.

**24. What specifically has the Company learned from places where the aquifer has been damaged by this in-situ process?**

**RESPONSE:** Again, no U.S. aquifer has ever been damaged by ISR mining. Upon completion of ISR operations, the subsurface contacted by the recovery solution returns to a state consistent with what it was being used for prior to mining.

**25. What new technology will the Company be incorporating to avoid a tragedy? Things such as updating the drilling process. Updating the type of casing used to line and protect our water supplies. Updating the monitoring and shut off system to limit the amount of hazardous and toxic elements being released into our ground water, soil and/or air. We want to see the plans of the wells, the manufacturers being used for the construction materials, all specifications on the construction materials, etc.**

**RESPONSE:** The Company will present to the regulatory agencies its formal applications for mining permits and licenses. These applications, to be submitted in the latter part of 2008, will contain all specifications for the planned ISR program and will be available for public review. The Company is in the early stages of its plans, and will soon begin collecting baseline environmental data. These baseline studies will be used to help define areas that may need additional protection, etc. Therefore, the company cannot provide any details on the proposed operations before our applications are presented to the permitting regulatory agencies.

**26. We understand that one of the Company goals is to change the negative face of uranium mining and especially the in-situ process. We are somewhat relieved to hear that, and yet still mistrusting. I'm sure you fully understand that we are very concerned about this type of operation and the risks to the quality of our water, soil and air. The likelihood of heavy metal poisoning and radiation poisoning are greatly heightened by having an in-situ uranium mining process on our aquifer. The Company has a great opportunity in meeting their goal of changing the negative face of uranium mining by working with the communities.**

**RESPONSE:** The Company welcomes the opportunity to communicate its plans with the public, through our fact sheets, informational hotline, ongoing meetings in various formats, as well as its Web site and periodic news updates on field activities.

**27. The Company has a great opportunity to show good-will in regard to maintaining an environmentally clean in-situ uranium mining process by offering to double the bonds that the state of Texas requires to be posted. If the Company is confident about their work ethic, this will not be any bother to them. Once the mining operation is complete and the site is vacated in a reclaimed and restored manner, the bond could be returned. Is the Company willing to put their money where their mouth is?**

**RESPONSE:** The Company intends to be an excellent corporate citizen in all aspects of mining operations. It has secured surety bonds as required by the government so that any costs of restoration and plugging of wells and removal of surface facilities are guaranteed, should a state or federal agency be required to contract with a third party to complete the work covered by the bond. Regulatory agencies require that the Company provide an appropriate bond amount to restore the site, and the bonds will stay in place until the restoration work is completed and approved. This type of "insurance" will guarantee the healthy future of the site for generations.

**28. According to a Company representative, the corporation stands to net around a billion dollars (at 4/13/07 uranium prices) from the Company project. Show us your good faith by helping us maintain the health of our water, soil and air here in Texas. The amount of profit available as well as the level of technology available really gives the Company an incredible opportunity to "clean up the act" of the uranium mining industry. Will you do that? Explain in detail how.**

**RESPONSE:** The Company representative never stated that the corporation will “net” that much money. At current uranium prices, however, it is anticipated that the company will make a considerable profit from the sales of uranium to U.S. utilities. The project also has the benefit of encouraging economic development, including excellent jobs and employment benefits for the workers.

**29. A Company representative has expressed how Texas is an agreement Environmental Impact Statement state and that this will ease the permitting process. What does this mean? Is the Company working on their Environmental Impact Statement of the project?**

**RESPONSE:** The U.S. Nuclear Regulatory Commission (NRC) oversees and regulates the process of in-situ uranium recovery. However, Texas is indeed an ‘Agreement State,’ meaning that state agencies have entered into agreement with the NRC to oversee all in-situ recovery licensing and permitting on that federal agency’s behalf. These agencies include the TDH Radiation Program of the Hazardous Materials and Waste Management Division, the TCEQ, and local county agencies. Texas agencies have a strong record of reviewing radiation matters. The effect of this responsibility is that the local state personnel are going to be the regulators, rather than a distant federal agency out of Washington. Yes, the Company is working through the permitting process, including conducting various assessments required by State and Federal regulations to evaluate potential environmental impact of our anticipated operations.

**30. We understand that one of the key factors in whether excursions of radioactive and heavy metal contaminated slurry enter into the aquifer greatly rely on the care taken in closing previous bore holes. Please outline your plan to study previous bore holes. Will this study be completed and included in the permit applications? What procedure would be used to close these bore holes properly? What documentation is in place or will be produced that shows that all bore holes were closed properly? Where exactly are these bore holes located? X,Y coordinates, please.**

**RESPONSE:** Previous companies did install and plug bore holes in the 1980s, and our understanding is that all holes were properly closed. The Company will perform aquifer testing to determine if the bore holes were sealed adequately. Where the testing determines that sealing is not adequate, the company will undertake a re-plugging of the bore holes through a process of re-drilling and plugging with bentonite.

**31. The Company mentioned that they will need to have proper lighting at all ISL sites. How will you protect neighbors from the light pollution?**

**RESPONSE:** Plant operations will be inside buildings and there will be very little light pollution. Where lights are required in well fields for night operations, the company will evaluate such alternative measures as downward directed lights and barriers to minimize light pollution.

**32. Please provide us with a copy of your emergency procedures in the event of leakage, spillage or other types of excursions of radioactive elements and/or heavy metals in our water, soil or air.**

**RESPONSE:** The TDH and TCEQ require all emergency plans and procedures to be complete and approved before work may begin. All industrial safety procedures, including the testing of air, water and soils will be conducted regularly to alleviate concerns of nearby residents. Once approved, those documents will be available for public inspection.

**33. Even the Company representatives admit that selenium released during the ISL process is a problem. What specific way do you plan to deal with selenium?**

**RESPONSE:** Reverse osmosis or some other treatment method will be employed to remove selenium in the restoration phase if it is determined to be necessary as a result of baseline data and engineering evaluations.

**34. Copies of recent financial statements, which show the stability of the company and financial strength to mitigate damages.**

**RESPONSE:** The Company will provide appropriate documentation regarding the Company's financial footing at the time required.

**35. Information about what the Company plans to do with the tailings and how the Company will ensure our safety from this radioactive material.**

**RESPONSE:** Again, there will be no tailings associated with the ISR mine sites. There will be no tailings at the site. The Company will extract and transport the ore in fluid form, which will be attached to the resin beads, to a central processing plant. Drill cuttings, which will be in mud pits, will be allowed to dry out and then covered with at least three feet of dirt, as required by state regulations.

**36. Information about what the Company intends to do with the other ores that are moved during the drilling and in-situ process.**

**RESPONSE:** Information requested will be provided as appropriate and required by the permitting authorities. The disposition of ore zone material encountered during drilling is specified by our permit to drill, and if found to be above acceptable levels, will be handled according to regulation.

**37. Provide information about what the Company intends to do with the sludge. Provide exact detail of the reclamation process and proof of previous successful reclamation projects.**

**RESPONSE:** Again, any wastes generated from ISR mining are disposed of only in an NRC-licensed disposal site as determined in the permitting phase. The ground-water restoration, or cleanup of an aquifer impacted by in-situ uranium solution mining, has been shown to be technically, physically and economically achievable. (Ref. NRC NUREG/CR 6870) Some recent successful ISR mine closures include the O'Hern, Hobson, Zamzow, Pawlik, and Longoria mines in South Texas, all owned by different companies. There are no historical cases in the United States where ISR has made a long-term negative impact on public health or the environment.

**38. Disclosure of incorrect, incomplete, or neglected reclamation projects.**

**RESPONSE:** While the Company's key personnel have a combined hundreds of years of experience in the uranium industry throughout the United States, and have brought a number of in-situ operations to the mining stage and five to the closure stage, the Company was recently formed and has not undertaken any previous recovery projects.

**39. Disclosure of damages to areas surrounding the mining sites and surrounding properties.**

**RESPONSE:** Any surface disturbances and excavation damages to areas surrounding the mining sites and properties created as a result of the Company activities will be remediated as required by the regulatory authorities.

**40. Information about the selection, training, and management of mining staff.**

**RESPONSE:** The Company has an excellent recruitment and training process and will use the experience of its management team to secure the right staff for the project. Governmental regulations require safety and hazardous material training for field personnel as well.

**41. Information about safeguards that will be put in place for the mined property and surrounding properties.**

**RESPONSE:** All information about safeguards will be provided to the TDH and TCEQ for review and approval as required by the permitting process.

**42. Will the community be haz-mat trained in the event of emergencies? Will 1st responders be haz-mat trained in the event of emergencies?**

**RESPONSE:** The Company will provide training as needed to local first responders, but hazards associated with this type of mining operation are minimal. The community hazardous material responders have sufficient training to deal with any such emergency. Because natural uranium poses no significant threat to human health or the environment, it can be readily cleaned up and removed to an approved disposal site.

**43. How often is monitoring well equipment checked to ensure that it is properly working?**

**RESPONSE:** Well equipment will be monitored constantly by instrumentation and checked several times each day by highly-trained staff.



Typical Monitoring Wells (Deep and Shallow)

**44. How will you ensure qualified people are hired when experts in the field are hard to find?**

**RESPONSE:** The Company has brought together experienced management and will be able to use this experience in the training of new staff.

**45. Will the Company cover the cost of annual cancer screenings for all that are within 2 miles of each mine site?**

**RESPONSE:** This question is inflammatory and reflects a misunderstanding of the potential for health effects from an ISR operation. Epidemiological studies have shown that ISR operations do not increase the risk of cancer. There is no need or requirement for annual cancer screenings as a result of this type of mining operation. (See Boice, *et al.*, 2003, "Cancer mortality in a Texas county with prior uranium mining and milling activities, 1950-2001"; *Journal of Radiological Protection*, See [Paper](#). Although the study was funded by the mining industry, the institute conducting the research has conducted many studies on the causes of cancer throughout the world (see: <http://www.ieilt.com/>)).

**46. What will the Company do to protect livestock already grazing on the "mine sites?" Will they pay for pasture rent and relocation?**

**RESPONSE:** Arrangements will be made with those landowners that may be affected by the traffic in the area or where livestock may be in the way of ISL operations.

**47. Who pays for the electricity to run the injection and extraction wells? How will this be paid?**

**RESPONSE:** The Company will secure electric power for its operations from the appropriate provider.

**48. How can we be assured that employees responsible for on-site monitoring the "mine site" are not ignoring the warnings?**

**RESPONSE:** The Company operators will receive extensive training, and the regulatory requirements for monitoring practices will be emphasized in training. Both management and the regulatory agencies will be auditing the performance of the operations on a regular basis.

**49. Can the Company show us five in-situ leaching mines that have been successfully reclaimed without the EPA changing the standards? Show them!**

**RESPONSE:** Regarding altered standards, the EPA does provide a secondary standard, referred to as alternate concentration limits (ACLs), if all practical efforts to meet the primary standard at the mine site are unsuccessful. ACLs apply only to water in the mine area, which is exempt from human use, and still provide an equivalent protection of human health and the environment.

**50. When are the Companies that made the messes they left behind with the last uranium boom going to clean up their messes?**

**RESPONSE:** The question referring to unspecified companies is untrue and incorrect in its premise, with regard to ISR mines. The messes were made when mining companies mined shallow uranium ore by open-pit methods in the 1960s to 1980s. All mining operations in Texas now employ the ISR method to recover deep uranium ore

**51. How does the Company propose to mine out of a shallower aquifer when their geological report states that uranium will be mined up to over 600 feet down, which is in the next aquifer?**

**RESPONSE:** The question makes assumptions that are untrue. The Gulf Coast Aquifer has been shown to exist down to at least 1,500 feet in this area. Aquifers here consist of sand and clay layers. Each ore deposit to be mined is located in a sand unit that is overlain and underlain by clay. Monitoring wells will surround each mining zone and also monitor the overlying and underlying sand layers to determine if any leakage occurs. Should any be found, it will immediately be cleaned up.

**52. Why should we trust mining companies whose executives have left a path of destruction while they were with other companies?**

**RESPONSE:** This question is both inflammatory and includes patently false information. However, if the mineral lease owner determines that a mining company is of suspect character the owner is under no obligation to lease to them.

**53. When will the Company present a sound reclamation plan?**

**RESPONSE:** A sound reclamation plan cannot be prepared until baseline site conditions are established and final geological studies have been completed. Thus, the final reclamation plan will be available when the permit application is submitted in the latter part of 2008 or early 2009. By TCEQ regulations, a reclamation plan must be submitted before a permit can be issued.

**54. What is the plan for handling the produced fluids on our property?**

**RESPONSE:** The Company hasn't finalized its plans to date because the investigations on the alternatives available are still underway. However, the produced-fluids plan will depend on the where the Company acquires land adjacent to the producing land.

**55. How do you plan to handle the two ponds on the property?**

**RESPONSE:** The Company is investigating the alternatives available to us and permitted by the state and federal regulatory agencies. However, the Company will make an effort to incorporate the smaller pond in our drilling pattern by locating well-sites on either side of the pond. The larger pond may have to be drained and relocated further south in order to accommodate our drilling patterns. These ponds likely will involve consideration of wetlands and the associated evaluation methods to define them (see: <http://www.wetlands.com/regq/tpge02e.htm>). This will require cooperation of the U.S. Corps. of Engineers. Once our investigations have been completed, the Company will discuss its findings with the affected landowners.

**56. Will we lose our agricultural exemption when mining begins?**

**RESPONSE:** This will require additional investigations and generic discussions with state and local regulatory agencies.

**57. What does a uranium production trend look like? Does it run for miles?**

**RESPONSE:** The lateral extent of producing uranium trend depends on the particular deposit. Some are short and thick, while others are long and narrow. Companies prefer the former because only a limited amount of land is required to produce a unit volume of uranium. In Texas, the trends often run for a few thousand feet in a preferred stratum and then disappear while re-appearing a few thousand feet away. This irregular pattern of mineralization requires a substantial amount of drilling in order to locate just where the uranium is in the subsurface.



**Aerial View of Typical Drilling Production Trend of South Texas Mine.**

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\* Note 1: It should be noted that the above typical questions are based on actual responses by landowners; and the above typical Company responses are based on responses from a number of different in-situ mining companies. Any application of the questions or responses to a specific project would require additional assessments and evaluations to establish the actual conditions present and additional evaluations to determine the appropriate State and Federal regulations that may apply to any specific project.

\*\* Note 2: The responses contained in this document are dynamic in that they may be changed as new information becomes available.

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