STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

REPORTER'S TRANSCRIPT OF PROCEEDINGS

COMMISSIONER HEARING

Status Report of the Division and Geolex, Inc. on Events Concerning Acid Gas Injection Well Replacements at Targa Midstream's Monument Gas processing Facility, Lea County, New Mexico

April 4, 2017

Santa Fe, New Mexico

BEFORE: DAVID R. CATANACH, CHAIRPERSON
PATRICK PADILLA, COMMISSIONER
DR. ROBERT S. BALCH, COMMISSIONER
BILL BRANCARD, ESQ.

This matter came on for hearing before the New Mexico Oil Conservation Commission on Tuesday, April 4, 2017, at the New Mexico Energy, Minerals and Natural Resources Department, Wendell Chino Building, 1220 South St. Francis Drive, Porter Hall, Room 102, Santa Fe, New Mexico.

REPORTED BY: Mary C. Hankins, CCR, RPR
New Mexico CCR #20
Paul Baca Professional Court Reporters
500 4th Street, Northwest, Suite 105
Albuquerque, New Mexico 87102
(505) 843-9241

APPEARANCES

FOR NEW MEXICO OIL CONSERVATION DIVISION:

PHILLIP GOETZE
STATE OF NEW MEXICO OIL CONSERVATION DIVISION
Energy, Minerals & Natural Resources Department
Engineering Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
(505) 476-3466
phillip.goetze@state.nm.us

FOR GEOLEX, INC.:

ALBERTO M. GUTIERREZ
GEOLEX, INC.
500 Marquette Avenue, Northwest, Suite 1350
Albuquerque, New Mexico 87102
(505) 842-8000
aag@geolex.com

(9:25 a.m.)

CHAIRMAN CATANACH: So the next order of business on the docket is a report -- status report that's going to be presented by the Division and Geolex, Inc. on events concerning acid gas injection well replacement at Targa's Midstream Monument Gas Processing Facility in Lea County, New Mexico.

And we'll turn it over at this time to Mr. Goetze and Mr. Gutierrez.

Good morning, Commissioners.

CHAIRMAN CATANACH: Morning.

MR. GOETZE: I am Phillip Goetze of the Oil Conservation Division, Engineering Bureau. We are here today, along with Alberto Gutierrez of Geolex, to give just a short presentation on the current situation for the Targa Monument area.

In the handout given to you is a summary, a chronology of what has happened of recent. A short synopsis of what happened there is, essentially, the well went out of -- not out of control, but we found that in the process of doing mechanical integrity testing, the well failed its MIT. Further investigation of it found that we had a well that was designed for 30 years that eventually only lasted for four-and-a-half years, that the effort to remediate the situation found there were numerous issues with the well. A lot of it seems to have stemmed from a variety of sources between material design, well completion, the operation of the well, as well as the participation of the OCD and oversight of it.

So to bring you up to speed on this, the well itself, the first notice that we had was the end of 2016. At that time the OCD had gone and initiated -- we had a two-year cycle for MIT. The operator, Targa, initiated an initial MIT to see what the status of the well was. It found that it could not pass the integrity testing and approached OCD to go ahead and do remedial action on the well. This proposed activity was to pull the tubing -- fill the well, pull the tubing and then conduct casing integrity to see where we had situations.

In that effort to do it, the series of activities -- there is a subsurface safety valve, which was identified as being, at one time, an issue of having paraffin buildup. It found to have a different OD than specced, and, therefore, to get a plug down to the packer was not possible. With this came a series of events of trying to pull out the injection tubing, which required, essentially, using a kill material, kill fluid into the casing, which later also may have induced casing failure because of its weight. That was proposed by what my district supervisor felt in Hobbs.

The final result of this is this well was plugged. It was plugged at best. The P&A is on the fourth page there. The district supervisor had stipulated our recoverable bridge plug be placed above the packer prior to any type of remediation on the casing. The effort to remediate the casing resulted in a cement plug at which could not be drilled through, and so the operator spent nearly 20 days trying to mill through his tubing and cement plug to get down to a lower leak and casing. At that point, it was then requested that the well be plugged and abandoned because the returns from the milling operation were starting to show casing and eventually showed cement from the exterior and some formation -- some San Andres Formation.

So with that, the Division was approached by Targa for a replacement well. We received a package from Geolex and went through the process. Most of the information for the first well was very much the same information. We did a notification process, and with the approval of this Commission, we issued an administrative order stipulating a second well to be placed and, therefore, online, hopefully to, at this point, deal with a large flaring issue which has now occurred around Hobbs in the Monument, especially the Monument San Andres project that Apache has next door. It's been flaring a lot of gas.

At this point I will give you my friend over here, Mr. Alberto Gutierrez, on the progress on the D2, which is the replacement well, and we'll come back.

MR. GUTIERREZ: As Mr. Goetze just informed you, basically the well failed an MIT back in July -- late July, August of a regularly scheduled MIT. And at that time, it appeared to us, and we advised Targa, that clearly in order to determine what the issues were with the well, it was going to require pulling the tubing and basically taking the well out of service and running casing integrity log, which was done, although as Mr. Goetze described, there were some issues with the IB of the subsurface safety valve and the inability to place a plug. But bottom line, they killed the well, got the tubing out, did a casing integrity log, of which Mr. Goetze provided you with some of the results of that casing integrity log. And what it showed, basically, is that there was a hole in the casing, a small hole, at about 6,600 feet. And there were some other areas also down below that depth that appeared to be compromised and maybe even another hole in the casing, but certainly some compromised casing.

Now, what was the approximate cause of the compromised casing is not -- even at this point is not really well understood. We know that early in the operation of the well, because of some inappropriate completion techniques that were used when the tubing was originally put together, that there were some leaks -- minor leaks from the tubing into the annular space, which were subsequently repaired back shortly after the well was put into service in 2011, yet I believe that -- I personally believe that as a result of that, there may have been some -- because this well was originally -- I need to step back for just one second.

The well was originally designed as a well that was going to inject acid gas and wastewater combined. Okay? And so consequently the packer fluid was not the typical diesel packer fluid that we use but stabilized brine and corrosive inhibited brine that was used as a packer fluid.

The only problem with that is that when Targa initially began operating the well, they did it in the way that it was originally anticipated to be operated, which was injecting both wastewater and acid gas. They then shifted to injecting only acid gas rather than wastewater because they were seeing some effects of the wastewater on the reservoir that were causing an undue increase in the injection pressure. It appeared that the reservoir was sensitive to this fresh water that was being injected, even though it's not common for the Devonian to behave that way. But that's what the operator determined that they would do. They just started using another saltwater disposal well and injecting purely acid gas into this well.

The problem, in my mind, then, is that when you have -- if you were going to do that as a permanent change of operation, my recommendation would have been to replace the packer fluid with diesel at that point. Because if you do have a leak into that annular spacing, you have an innocuous [sic;phonetic] packer fluid, and you have a leak of just acid gas. You're definitely creating a very corrosive environment.

So that may have been part of the reason for the ultimate lack of integrity of the casing, but there is also some potential for some corrosive waters in the Glorieta and in some other of the formations that are near where these leaks were detected.

But in any case, it was my recommendation, at the time when I saw the casing integrity logs, that the company not even further attempt to remediate the well but rather to plug it. Well, they didn't take that recommendation. They decided to continue to attempt to remediate it. And when they were trying to squeeze off this hole in the casing, they collapsed the casing onto the -- onto the -- as Mr. Goetze described, the tubing that was being used to introduce the cement.

And so after spending approximately a million and a half or more dollars attempting to fix that problem, they ultimately plugged and abandoned the well, with the Division's permission.

And then as Mr. Goetze mentioned, we approached the Division with an application, which the Division approved administratively, to replace the well with a well, in my opinion, of superior design than what was originally in place.

And one of the -- and also because the well was going to be essentially a twin of the existing well and close to the bottom-hole location of the existing well which had already been injecting acid gas for approximately five years, I insisted in the design that the well be cased with the intermediate casing all the way down to just above the top of the injection zone because I wanted to make absolutely certain that we could control that well when we drilled into the injection zone essentially where we had been injecting previously.

So what resulted is a well that has got the surface casing, plus 9-5/8-inch surface casing going all the way down to the very first shale immediately above the Devonian, and then inside of that, 7-inch casing, both of which are cemented with WellLock resistant cement. And in the production casing, we have CRA casing in the bottom 300 feet, which is where the packer has been set.

Things went fairly well. I mean, they had some issues with drilling problems, but those were resolved when the well was completed. The well was completed in -- just at the end of January, beginning of February of this year and put back into service.

Shortly after the well was put into service, it was noted that there was a tubing leak. So the well was again worked over, and at this point, there were two things that were discovered. There was a bad cross-over -- an actual cross-over that had a small crack in it immediately above the subsurface safety valve, and that was identified through a series of both noise and temperature surveys in the tubing and annulus of the well, and then the tubing was pulled. This was discovered that this was a problem.

There was also a problem -- and we're not really sure it happened when the well was being taken apart or when it was there, but there was a problem with the tubing hanger as well. There were some issues of leaking in the tubing hanger in the places where the tubing hanger had been modified because the new well required not only the subsurface safety valve like the old well, but consistent with what the Commission is now requiring or the Division is recommending is to have downhole pressure temperature monitoring immediately above the packer. And so in order to do that, the hanger had to be modified to take both leads from the subsurface safety valve and the line from the PT sub at the base of the well.

In any case, what ends up happening is the tubing gets pulled. It is determined that there is this bad cross-over. It's determined that there is this issue with the hanger, and then it is also determined that the thread, the actual premium thread which was specified in the -- in the tubing, was just not appropriately cut. And so there was some leakage going on at the couplings in spite of the fact that they were properly torqued and tested.

So at that point, what we did was -- and, of course, as Mr. Goetze mentioned, there had been a lot of flaring going on since last August because the well had been essentially out of surface, even though they had minimized and shunted gas to different facilities to try to minimize that effect.

Bottom line, all the tubing was pulled again, re-inspected. We put new -- we put the J55 tubing, instead of the L80, that is lined because that was available to be tested and put back in, and we knew that we could make that tubing work and that that tubing would be corrosion resistant. It still has the CRA at the bottom and the downhole pressure monitoring, et cetera. That was put back together.

And basically what I've just described to you is what is summarized in the three pages that I gave you.

The well was put back into service about two weeks ago, and we've been monitoring the injection parameters closely during that period of time, and it appears that the problems are resolved. And we feel that both the added casing -- intermediate casing and the use of this WellLock cement will -- and the replacement of the packer fluid with the appropriate corrosion-inhibited diesel packer fluid will result in a well that continues to operated appropriately.

I have recommended to Targa that they obtain a new tubing string with the appropriate VAM TOP threads that they have on hand and as a critical spare for the well.

In addition -- one thing that Mr. Goetze had not mentioned -- we had submitted, a few months back, an application that's pending, and we're anticipating that the Division will approve for another well, a redundant well, so that this facility will end up with two wells into the Devonian at that location.

So basically I think that is a summary of what occurred. I think that both the Division and our client and ourselves certainly have emphasized to Targa the need for better quality control on the companies that actually do the drilling and installation of the well, and I think they recognize that. And I think they hopefully have learned their lesson about penny wise and pound foolish. But it is a struggle that continues and not unlike what sometimes happens with other -- it's by no means only a situation with Targa. But sometimes people lose track of -- especially in these well operations.

Like I said, I think it would have been much better and it would have saved a lot more money if they had plugged the well from when they first saw that casing-integrity problem rather than try to repair it. But, of course, they also were under pressure from NMED to minimize the amount of time that the flaring would be taking place. So I think there were a lot of forces pushing in one way or another.

But I think this summary which I've provided you, I think summarizes these activities quite clearly. It also gives the final design for the well as installed. And within the next two to three days -- we just finished it this week. The full, what we call, end-of-well report, which is that huge binder that gives everything that happened during the installation of the well, will be provided to the Division later this week. And hopefully we will soon have an application approved for another well and that Targa will schedule this according to their capital constraints, probably to install in 2018.

So that really is the summary of where we are. If the Commission has any questions, I'd be happy to try and answer them.

COMMISSIONER BALCH: I'm glad they decided to drill the redundant well. I think they have ample evidence of that now?

MR. GUTIERREZ: Yes, sir.

COMMISSIONER BALCH: Eight months of downtime?

MR. GUTIERREZ: Yes, sir.

COMMISSIONER BALCH: When you re-entered the formation, were you able to gather fluid and any sort of formation samples? I presume there wasn't any coring, but --

MR. GUTIERREZ: No. We did actually core the cap rock.

COMMISSIONER BALCH: Okay.

MR. GUTIERREZ: We decided not to core the formation because of just safety issues. I mean, we tried to just keep that acid gas down there, not let it up. So we did not really get a formation fluid sample. We did, however, run a formation microimaging log of the formation and gathered some additional, I think, better evidence, and we did do a long-term injectivity and step-rate test and falloff test. So we did gather baseline data on the reservoir.

It really has not pressured up to any degree from the initial injection. I mean, we noticed that it -- it's a pretty stout reservoir in that area. There is a lot of secondary porosity associated with dissolution of the Devonian, and in particular the Fusselman dolomites in that area. So we have gathered, I think, the baseline information.

And one thing that Mr. Goetze did not mention is that the revised order does, one, bring this well up to speed in terms of annual MITs, the routine monitoring of downhole PT conditions and the quarterly reporting of those conditions to the Division. And, of course, we, prior to getting the well into service, did discuss with the Division the immediate notification parameters that would indicate that the Division will receive notice immediately if there is any kind of situation that indicates that we're having any problems with the well. So that's where we are.

CHAIRMAN CATANACH: I guess I've got a couple.

Mr. Gutierrez, does the existing well have the capacity to take all the gas that's being produced there?

MR. GUTIERREZ: Yes, sir. It has capacity to take about twice what their max allowable rate is.

CHAIRMAN CATANACH: Okay. So it's handling everything right now?

MR. GUTIERREZ: Yes, sir.

CHAIRMAN CATANACH: Are you strictly injecting the acid gas into this well now?

MR. GUTIERREZ: Yes, sir. There is no water.

CHAIRMAN CATANACH: And the application for the redundant well has been filed and is currently under review?

MR. GOETZE: We're at this point now where we're moving forward. The Division has incorporated its previous order, the administrative order, for the D2 replacement well, the second well. A lot of the requirements have come out of a Commission hearing as far as acid gas wells. Our feelings are that because we are working in an area that has already been reviewed extensively for the first well, that issuing administrative orders is the best route. We feel that we have enough information on AOR wells and the current situation, plus additional information that comes in with each application.

The #3 well is proposed to be approximately 200 feet north of the #2 well, so we're sharing the same reservoir information, same OR wells, same notification process. And in the effort for the #3, Targa, Geolex has duplicated their effort to have the double sheathing and all the materials that went into this newer well, so we have the same level of confidence as well as quality that we can expect for the product in the #1 well.

MR. GUTIERREZ: Also, further comment on that aspect just to make sure that the Commission realizes it. As part of the application for both this initial replacement well, which was approved administratively, as well as for the #3 well, which is currently pending, we did provide individual notice to all of the parties that were noticed the first time, and there were no concerns or objections, even though we didn't go to hearing on it.

COMMISSIONER BALCH: So when you offset a well and redrill -- and this may occur again in a 30-year operation on this site -- do you run into any danger of including additional wells in your area of review as you step out?

MR. GUTIERREZ: Absolutely. I mean, we -- as part of the application for the wells, we do do an additional -- essentially, the application is as if it were a brand-new well. So we go back and look at any changes in the existing wells or the completion status of those wells within the area of review.

COMMISSIONER BALCH: I'm thinking --

MR. GUTIERREZ: And you're saying expanded area of review because of the already injection?

COMMISSIONER BALCH: Well, because you offset your well a few hundred feet, and you increase your one-mile radius in that direction.

MR. GUTIERREZ: Yes, we do. Yes. We exactly do.

COMMISSIONER BALCH: I'm thinking ahead towards any potential future acid gas rule. It might be advisable to permit an area rather than a particular well site.

MR. GUTIERREZ: I think that does make some sense, and that's an issue that I've discussed with Mr. Goetze on numerous occasions. And we really do need these acid gas rules. I mean -- so I understand the Division's very busy, and I personally will help in any way I can to -- as I have in the past, to participate in development of that.

But one other thing which I will mention to the Commission aside from this point that I would encourage the Division to do. I don't know whether it is something that you have the authority to do unilaterally. I believe that you do, however. And one is that, you know, we do -- you know, we've been doing this now for 15 years. We've got acid gas wells that have been put in at a variety of different points in the evolution of the understanding of how to do this right. And there are some acid gas wells out in the state here that still are on one once-every-five-year MIT requirements. We really need to change that to annual MIT requirements. And I would think that the universe of acid gas wells is small enough that that's something the Division could do, I think, with just a letter saying, you know -- just like when -- again, I don't know what the constraints are on the Division doing that, but I think as a matter of policy, that's a wise policy to have.

COMMISSIONER BALCH: Is that something we can just do?

(Laughter.)

CHAIRMAN CATANACH: Yes. Yes. Well, I think we can.

COMMISSIONER PADILLA: He's laughing.

MR. GOETZE: Yeah. We're laughing.

We've pulled this under Class 2 as a way of getting it in.

COMMISSIONER BALCH: Okay.

MR. GOETZE: By rule, we're supposed to be looking at every well every five years, all 5,000 of them. I think these require more proactive review, and I think that we've been lax in that because these have gone along so well without issue. And then, of course, the big thing is that when they fail, it's not just a little bit of water and an aquifer. We have a very toxic substance that's going into the ground in a high-volume area associated, which can cause ripple effects. The flaring alone was big enough to cause everybody to stand up.

MR. GUTIERREZ: Right. Yeah. I think that also the operators are beginning to understand that, you know, when you do -- if you run into a problem with one of these wells, it's not something that you can solve like that (snapping fingers). And they, I think, now have integrated in their minds that if their well fails, they can't operate their plant. And that means that there is a lot of flaring that goes on, as Mr. Goetze was describing. So I think people are beginning to understand that the redundancy of the well is a critical part of the operation. But that's something, I think, again, to look at in the AGI rules.

COMMISSIONER BALCH: I agree.

COMMISSIONER PADILLA: Have you revised your estimate for the well life on the second well downward somewhat?

MR. GUTIERREZ: No.

COMMISSIONER PADILLA: No?

MR. GUTIERREZ: I believe that the -- you know, our history has indicated that these wells have that lifetime if they're operated properly and designed and constructed properly. But yes. Are there problems that can occur when you have, you know, any kind of mechanical incidents? Yes. But there is a difference -- like I'll give an example.

We had a tubing leak back in 2011 -- end of 2011 and the beginning of 2012 in a DCP well at Linam which has to be reworked, and subsequently we put in a redundant well out there. And now we are going back to the first well, as a matter of fact, later this month and reworking the first well to upgrade it to the current requirement even though it's still operating well and it's been -- and we've been reporting on it monthly for five years ever since that workover.

So there is some maintenance that is required periodically in these wells, but, I mean, if the wells are designed and operated properly, they should have a 30- to 40-year life.

COMMISSIONER PADILLA: So the Monument Number 1 is a domino effect of unfortunate mechanical circumstances?

MR. GUTIERREZ: Yes. And I would say probably less than optimal operation as well.

COMMISSIONER PADILLA: Okay.

The L80 was the tubing that had a bad cross-over in it?

MR. GUTIERREZ: Yes, sir.

COMMISSIONER PADILLA: So you went back to the J55?

MR. GUTIERREZ: No, no. It's fiberglass lined.

COMMISSIONER PADILLA: The J55?

MR. GUTIERREZ: Yes.

COMMISSIONER PADILLA: Okay. What was the spec on the casing that collapsed? Do you know what the weight was, 110, 180, something like that?

MR. GUTIERREZ: No. It was --

MR. GOETZE: I believe I remember it being lighter. It was at a transition point, so that's what --

MR. GUTIERREZ: I don't recall specifically what the original casing spec on that was.

COMMISSIONER PADILLA: So during the squeeze, the casing collapsed on the squeeze tubing?

MR. GUTIERREZ: Yes, sir. You had to mill that out --

COMMISSONER PADILLA: Mill that out.

MR. GUTIERREZ: -- to be able to plug the well.

COMMISSIONER PADILLA: Did it eventually mill out through the sidewall? Is that where you got the San Andres coming into play?

MR. GOETZE: That's what we believe.

MR. GUTIERREZ: Yeah. Well, plus we already had a hole in the integrity --

MR. GOETZE: Yeah.

MR. GUTIERREZ: But once it collapsed, yes.

MR. GOETZE: And only 5 feet or 10 feet. So at that point, it was -- it was very obvious that this was not going to come back. Again, it was an earlier well. The design of it was -- was done correctly at best technology at that time. However, upon review and upon the practice, we could see it was wholly insufficient.

MR. GUTIERREZ: And, frankly, if it had been operated the way it was intended to be operated, I don't think we would be here today. If it had continued to be operated as a wet injection well, it would have been less likely that we would have had a leak out of the lined J55 tubing to begin with.

COMMISSIONER PADILLA: So has Targa learned their lesson on that one?

MR. GUTIERREZ: I would hope so. Yes, sir. And I believe so.

CHAIRMAN CATANACH: Do you know what the casing spec is, 9-7/8 or the new --

MR. GUTIERREZ: Okay. 9-5/8 is 40-pound J55 STC, and that goes all the way to -- to the -- immediately above the Woodford, which is a depth of 8,300 feet. Then we have within that production casing which is at 29-pound HCP and 10 LTC, and that goes down to 8,050 feet. And then we have 300 feet of -- we have a cross-over and then 300 feet of Sumitomo 2535 [sic] VAM TOP, which is a corrosion-resistant casing, down to the top of the injection zone at 8,350. And from there, we have open hole in the Devonian below that.

So now the entire -- you know, we basically have two sheets of casing all the way down. And in between it, we have -- another improvement which is incorporated into -- and we have incorporated it into all of our wells now is there is available, since about a year and a half, two years ago, a new type of resin cement that is more flexible and more corrosion resistant than the previous Portland-based products that were sold by both Halliburton and Schlumberger as corrosion resistant. Schlumberger has a tradename, EverCRETE, and that is their corrosion-resistant Portland-based cement. And the same thing -- I can't remember the name of Halliburton's equivalent, but now they also have this WellLock resin cement, which is even more resistant to both CO_2 and H_2S and carbonic and sulfuric acid.

So I think it works better because it flows better, and it also works better because it is more resistant and is less likely to result in a micro-annulus between the casing and the cement.

The bad -- the flip side is -- you know, like, for example, the cement job on this well just for the WellLock portion was $380,000, you know. So this stuff costs like $2,000 or $3,000 a barrel. So, you know -- but that's the way it is. That's what you've got to use, in my view.

COMMISSIONER PADILLA: You can contrast that with eight months of downtime.

MR. GUTIERREZ: Yes, sir.

COMMISSIONER BALCH: And a new well and $5 million of work to get it in and it didn't do anything.

MR. GUTIERREZ: That's right. And another, you know, three-quarters of a million to plug it. Yeah. That's right.

CHAIRMAN CATANACH: Mr. Goetze, when can you have the acid gas rules ready to go?

(Laughter.)

MR. GOETZE: Tomorrow. It depends on -- we also have a new requirement, I believe, coming out in the rulemaking process. We have to resolve that, at least get some guidelines. So if it's going to happen after July 1st, then we're going to be playing with a new set of rules. So it doesn't mean we can't revise, we can't include what we've learned from the recent progress, but we could have them done fairly quickly.

CHAIRMAN CATANACH: You also may have to account for the furloughs.

MR. GOETZE: Well, I mean, you just write at home.

MR. GUTIERREZ: Well, Mr. Chairman and Commissioners, I think we had a pretty good base put together the last time we spent a year and a half putting these rules together, with a combined industry and a stakeholder group, and I think that, you know, it could pick up where we left off there fairly well.

COMMISSIONER BALCH: We can take some guidance from what the Commission has done on all those other applications.

CHAIRMAN CATANACH: I guess the only other issue I have with this --

And thank you for the presentation. We appreciate all the information.

We had voted, basically, to allow administrative approval of these two particular applications due to the urgency of the situation. And going forward, I guess I would like to discuss with the Commission: Is that a practice that we want to keep, where we refer these to either administrative approval or approval before an Examiner Hearing and not before the full Commission? Do you guys have any thoughts on that?

COMMISSIONER PADILLA: Depends how quickly the rule comes out. In the absence of a rule, I think it's --

COMMISSIONER BALCH: Sort of any new application, I think, has to come from the Commission. But in the interest of -- similarly, in the interest of anything done quickly, I have no problem with notice and administrative approval -- notice of approval -- notice from the Commission for a chance to object.

CHAIRMAN CATANACH: Notice from the Commission of the filing of the administrative application?

COMMISSIONER PADILLA: The administrative application only pertains to these two, correct?

CHAIRMAN CATANACH: Were these two applications processed administratively, Mr. Goetze?

MR. GOETZE: Yes. The replacement well and the next replacement well, we're looking at issuing an administrative order using the Commission order as a guidance. So, again, we're looking at wells that are in the same area. The AOR may shift a little bit, but we do this a lot for our permit area wells, which are usually the EOR, enhanced oil recovery operations.

COMMISSIONER BALCH: My recollection from the last hearings is that the wells within the AOR and their disposition is usually one of the hottest issues we have to address. So shifting your AOR and including a new well could very well expose some new person to being affected.

MR. GOETZE: Oh, yeah.

MR. GUTIERREZ: And consequently that's why we provide notice to all of those individuals.

And I think the, kind of, working approach has been if we're going into the same zone and it's basically a redundant well at the same location and we've noticed all the original parties, plus any other parties that may be affected by a revised AOR, and there is no objection, then it seems like it would make sense do it administratively since the first time around, it went to the Commission anyway.

MR. GOETZE: In this case, for the Monument #1, Apache did file a protest, along with another party, and, of course, you had a hearing about the remediation of it, the AOR well. And so I think in that case, the Division makes an effort to go out where we've had known concern and have these people talk with their folks to make sure that they've had -- and, of course, the magic of an application being lost within a corporation is always out there. So the Division makes an effort to communicate directly with the AOR folks who have previously had issues with the same type of application.

COMMISSIONER BALCH: So it might not hurt, in the rule that you're writing on weekends and on your furlough days, to permit an area instead of a point initially.

MR. GOETZE: Well, this is something we can have a discussion about. We could do a combination. I think having an individual well -- as a disposal well, we tend to -- under our primacy agreement, area permits are for EOR projects, whether it's recovery projects, and then the disposal wells are handled as a singular well. What it may include is a singular well permit looking at an area, since these are tied to a facility that you're going to have --

COMMISSIONER BALCH: Add 500 feet to the area of review.

COMMISSIONER PADILLA: Right.

COMMISSIONER BALCH: And then you probably have it covered for future replacement.

MR. GOETZE: We're doing a one-mile review now which doubles what our AOR is under that primacy --

COMMISSIONER PADILLA: Right. I mean the area -- approve the absolute need for redundant wells --

MR. GUTIERREZ: Right. I think one of the things to remind the Commission is that you have also imposed a requirement on most of the -- well, certainly Commission orders that have been issued in the last four or five years at least, maybe more to come back to the Commission with a report after ten years of the injection which addresses looking at the area. And I think that, in part, is almost like an area of permit.

CHAIRMAN CATANACH: So I guess what I'm hearing from the Commission is we're comfortable allowing the Division to continue processing these applications administratively, unless we have a concern and want to bring it to Commission hearing? Is that basically --

COMMISSIONER BALCH: I think that before -- I think that a new application should come to the Commission for a replacement well for any action where time is of the essence.

COMMISSIONER PADILLA: I agree with that.

CHAIRMAN CATANACH: Okay. So future applications in different areas, we'll resume the practice of bringing them before the Commission, Mr. Goetze.

MR. GOETZE: Very good. And that's all -- the redundant wells need be presented to you, as we have done now a presentation.

COMMISSIONER BALCH: That will be a wonderful way to get that information.

MR. GOETZE: Right. Right.

CHAIRMAN CATANACH: Thank you very much, gentlemen.

MR. GOETZE: Thank you.

MR. BRANCARD: I guess my question is --

MR. GOETZE: Oh, no, the lawyer.

MR. BRANCARD: -- in looking at these older approvals from 10, 15 years ago that were done by the Division, to go back to them, what are the primary areas where you could see those applications? The wells are already in place. What can you do now to improve the safety factors related to those wells?

MR. GUTIERREZ: My personal opinion, two things: One, annual MITs; two, the requirement of periodic, whether it be quarterly or annual, submission to the Division of analysis of the primary injection parameters and how the wells are doing, the same kind of thing that we're providing -- a requirement of all of the new orders that you've put out.

MR. GOETZE: We may also run into the fact that many of the earlier wells don't have the parameters that are in place now for pressure testing, and so pressure temperature information may not be available.

But certainly, as a Division, our view of moving up and making these annual MITs certainly is something that is historically proven to be very, very beneficial.

MR. GUTIERREZ: And I would add, from my -- or just a small modification to what Mr. Goetze said. There is definite -- all of these wells have PT information at the surface. It's just that they don't all have PT information in the downhole, and even some of the wells that have installations of that, it has worked less than -- because I think that technology is still kind of developing. But it does provide some help for sure.

COMMISSIONER BALCH: You can do intermittent monitoring of pressure temperature in an existing well using memory gauges.

MR. GUTIERREZ: Yes, sir. Absolutely.

COMMISSIONER BALCH: So you could go on and run a one-month sample or every six months, something like that, a wireline, without disruption to the well. Well, limited disruption.

MR. GUTIERREZ: Yeah. I mean, an acid gas well is a little bit more difficult because you definitely have to put in a lubricator and all these -- but -- so I wouldn't -- I think we've come up with an approach with the Division, as a matter of fact, to address this on an interim basis because what we've come up with is that if -- for example, for wells that have downhole PT gauges and then those PT gauges fail, you know, you don't necessarily want to take the whole well apart just to go replace PT gauge at the bottom and that there are some procedures that we have agreed upon with the Division and have included in applications of what we do if they should fail in terms of putting in temporary gauges, how often we put them in, and then how many years you have until you can -- that you can do that until you have to go in and work over the well and put a new PT gauge that works.

COMMISSIONER BALCH: Well, a PT gauge is -- when you use that project downhole, you-all did a CO_2 storage and EOR project. We have a downhole pressure temperature, and through then the tubing right above the packer, and then from that point up to the surface, we have distributed temperature, correct? It's a fiber-optic cable that measures temperature in the annular space --

MR. GUTIERREZ: Yes.

COMMISSIONER BALCH: -- at a fairly -- any sort of frequency --

MR. GUTIERREZ: We use that when we test the wells.

COMMISSIONER BALCH: Yeah. But if you leave that in permanently, it gives you a much better indication of a wellbore leak.

MR. GUTIERREZ: Absolutely. Absolutely.

COMMISSIONER BALCH: Good stuff.

CHAIRMAN CATANACH: So I guess we can work on the process of how we would like to get these permits amended. We can notify the Applicant of those particular wells and then request an amendment to the order, and if they object, we can give them the opportunity for hearing, or we'll figure something out. We definitely have to check the accuracy of those older wells.

MR. GOETZE: I'm sure the Commission would like to have more hearings on acid gas wells.

COMMISSIONER BALCH: Personally, I find them fascinating.

(Laughter.)

MR. GOETZE: I know you do. One out of three is not bad.

MR. GUTIERREZ: So do I, by the way.

CHAIRMAN CATANACH: All right. Thank you, gentlemen.

MR. GUTIERREZ: Thank you, Commissioners.

(The status report concludes, 10:16 a.m.)

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

CERTIFICATE OF COURT REPORTER

I, MARY C. HANKINS, Certified Court Reporter, New Mexico Certified Court Reporter No. 20, and Registered Professional Reporter, do hereby certify that I reported the foregoing proceedings in stenographic shorthand and that the foregoing pages are a true and correct transcript of those proceedings that were reduced to printed form by me to the best of my ability.

I FURTHER CERTIFY that the Reporter's Record of the proceedings truly and accurately reflects the exhibits, if any, offered by the respective parties.

I FURTHER CERTIFY that I am neither employed by nor related to any of the parties or attorneys in this case and that I have no interest in the final disposition of this case.

MARY C. HANKINS, CCR, RPR
Certified Court Reporter
New Mexico CCR No. 20
Date of CCR Expiration: 12/31/2017
Paul Baca Professional Court Reporters