

City of Santa Fe, New Mexico

memo

DATE: March 24, 2015

TO: Public Utilities Committee Members

VIA: Nick Schiavo, Public Utilities and Water Division Director *NSA*

FROM: Alex Puglisi, Interim Source of Supply Manager/Environmental Compliance Specialist *AP*

ITEM

The Public Utilities Department's Environment Office is providing this update to the previous briefing given to the Public Utilities Committee at its October 1, 2014 meeting regarding the status of the ongoing monitoring and abatement of the Public Service Company of New Mexico (PNM) Santa Fe Generating Station (SFGS) site on Baca Street. This contamination affects both SF Well-1 (aka, Baca Street Well) and groundwater located at the site. The briefing also covers recent decisions by the New Mexico Environment Department (NMED) and PNM to enter into a new Memorandum of Understanding covering further investigation and remediation of the site under both the New Mexico Corrective Action Fund, administered by the NMED Petroleum Storage Tank Bureau, and the NM Groundwater Protection Regulations (20.6.2 NMAC) for non-petroleum related contaminants.

BACKGROUND AND SUMMARY

The history of SF Well #1 and the Baca Street site began in earnest in 1988 when Benzene and EDB (gasoline additive) were discovered at the wellhead and the well was shut down in October, 1988. Initial investigation and monitoring of the site after the shutdown resulted in the resumption of SF-1 Well production in 1989 with carbon filtration units treating produced water prior to its introduction into the Sangre de Cristo Water Company's distribution system. SF Well #1 was producing approximately 350,000 – 400,000 gallons per day (gpd) of water on average at that time. The well was shut down again, in April, 1992, after the discovery of gasoline in a nearby monitoring well. Since that time, all continuing remediation and ongoing monitoring of this site has been covered under a negotiated 1992 Settlement Agreement (Settlement Agreement) signed by the New Mexico Environment Department, the Public Service Company of New Mexico, and a PNM subsidiary at that time – the Sangre De Cristo Water Company. A chronology of major events at the site, as well as the initial Settlement Agreement and a future MOU signed with the City of Santa Fe, is attached for your information. This settlement agreement has been in effect for almost 22 years and complete remediation of the site and ultimate protection of SF-1 has not yet occurred. The City of Santa Fe has been working with the NMED since 2011 to increase monitoring and investigation of the site and to encourage actions in concert with both NMED and PNM to achieve final remediation of the site. However, it has always been staff's professional opinion that increased and expedited action is necessary on the part of both NMED and PNM to move this site toward the maximum level of remediation achievable.

In April 2012, the City of Santa Fe requested that NMED check and take samples at all monitoring wells at the Baca Street Site including those wells not sampled by PNM pursuant to the conditions of the Settlement Agreement. The results of that sampling effort indicated the presence of several new conditions at the site,

which were not addressed under the original agreement or its amendments. These included the prevalence of high nitrate concentrations in wells previously used by PNM for bioremediation efforts and the presence of up to 48.0 inches of Light Non-Aqueous Phase Liquid in one well (USTB-17). The City of Santa Fe called for the official formation of a Technical Advisory Group (TAG) in December 2012, based on the results of NMED's sampling efforts. The first TAG meeting, pursuant to the NMED/PNM settlement agreement was convened on January 16, 2013.

The newly discovered conditions at the Baca Street well site led City of Santa Fe staff to call for a reopening and amendment of the 1992 settlement agreement, pursuant to the language contained in that document. The City based its argument on the presence of new conditions at the site not "known to be present" when the original agreement was implemented. The formation of the TAG, and the City's call for reopening of the Settlement Agreement, led PNM to consider a new investigation and further abatement of contamination at the site. PNM announced at a TAG in October 2014 that the company was formally considering entrance into the New Mexico Corrective Action Fund to pursue further investigation and remediation of the Baca Street site. NMED supported PNM's consideration of that option and offered to provide a pre-determination that the site was, in fact, eligible for coverage under the CAF. NMED provided that pre-determination of eligibility in November, 2014. Subsequently, PNM legal and technical staff formally announced that they were going to enter the site into the CAF on December 19, 2014. On March 22, 2015, PNM presented a draft MOU for consideration to the NMED and the City of Santa Fe which addressed further investigation and remediation of the site, as well as its transition under both the CAF and the NM Ground Water Protection Regulations. The City and the NMED are both currently reviewing and providing comments on the draft MOU to PNM in advance of another meeting scheduled for April 13th.

STAFF RECOMMENDATIONS

Staff of the Public Utilities Department recommends the following continued actions with respect to SF-1 Well and the Baca Street site:

- Continued participation by City staff in TAG and other meetings to further action at the site under the current Settlement Agreement, as well as the planned transition of the site for investigation and remediation under the New Mexico CAF, the NM Ground Water Protection Regulations and a new Memorandum of Understanding between NMED and PNM;
- Direct communications between the governing body, PNM and NMED regarding the City's need to have contamination at the site fully remediated, as soon as possible, especially in light of the City's possible future need to drill a replacement well at, or nearby, the Baca Street site;
- Continued effort by the City's technical and legal staff to ensure that any MOU between PNM and NMED pursuant to the CAF adequately addresses any petroleum hydrocarbon related contamination, and any incidental contamination, at the site;
- Continued efforts by the City's technical and legal staff to ensure that any new MOU or agreement between PNM and the NMED adequately addresses any contaminants, which cannot be abated pursuant to the CAF, and which are covered exclusively under the NM Ground Water Protection Act and NM Ground Water Protection Regulations;
- Continued efforts by City staff to negotiate and finalize an appropriate agreement between PNM and the City to allow access and use of the Baca Street Well site during site investigation and remediation;
- Technical and legal staff should carefully review and evaluate any future request for agreement regarding use of the City's water rights for the purposes of investigation and remediation at the Baca Street site to ensure that any such agreement is in the best interest of the City of Santa Fe; and,
- Technical and legal staff should continue to evaluate and support all regulatory and administrative options to ensure continued and expedient action by the NMED and PNM for the full investigation and remediation of the Baca Street site, under all applicable provisions of law.

Chronology of dates for PNM SF Generating Station Site (Santa Fe Well #1 aka Baca Street Well Site)

- 1950-1980: PNM operated electrical generating station near wellhead.
- 1951: Santa Fe Well was drilled and turned on.
- 1952: 84,000 gallon fuel oil spill occurred on PNM property.
- 1953-1985: PNM operated service center near wellhead.
- Oct. 1988: Benzene and EDB contamination discovered in wellhead. Santa Fe Well turned off.
- 1989: Four monitor wells drilled on PNM property. Soil borings drilled underneath former USTs.
- June 1989: Regular meetings began between NMED, PNM, and community.
- Oct. 1989: Santa Fe Well put back into service with carbon filter attached.
- Aug. 1990: PNM excavated PCE-contaminated soil near service center.
- April 1992: Santa Fe Well turned off again after discovery of gasoline in nearby monitor well.
- Dec. 1992: Settlement Agreement signed. The Agreement provided brief history of site, details of investigation to be performed, jurisdiction of parties involved, information on cost reimbursement, and the necessity of quarterly progress reports.
- April 1993: First Amendment signed. Required obligations of PNM and its successors.
- May 1995: NMED sent letter designating PNM as source of contamination.
- July 1995: City of Santa Fe bought Sangre de Cristo Water Company from PNM. PNM continued to operate the company for the City.
- July 1995: Second Amendment signed. PNM agreed to continue investigation despite disagreement with NMED on source of contamination. Petroleum Corrective Action Fund now available for reimbursement.
- April 1996: Third Amendment signed. Provided payment to NMED by PNM for oversight activities.
- Oct. 1996: Fourth Amendment signed. Provided that PNM would pay \$1.22 million for aquifer testing, ground water monitoring, and remediation of site. Cooperation with City of Santa Fe acknowledged as necessary due to its ownership of Santa Fe Well.
- Nov. 1997: MOU signed. NMED, PNM, and City of Santa Fe accepted IT Corp. as remediation consultant and agreed to share information. City agreed to allow access to site and accept treated ground water for use in municipal supply system. PNM agreed to donate remediation system to City at the end of its obligation.
- Oct. 1998: Santa Fe Well is turned back on with remediation system attached.
- July 2001: City of Santa Fe took over operation of Sangre de Cristo Water from PNM.
- Oct. 2001: Injection system was turned off to begin compliance monitoring. Monitoring would determine whether site contamination had been reduced by at least 90%.
- March 2002: Injection system was turned back on.
- Sept. 2002: Injection system was turned off due to high levels of oxygen in the aquifer.
- Aug. 2003: Fifth Amendment signed. PNM agreed to continue operating the remediation system until contaminant concentrations in selected monitoring wells are below applicable

- ground water and drinking water standards for eight consecutive quarters. In addition, PNM agreed to install 1 extraction well and 2 monitoring wells in the northern plume area.
- April, 2012: NMED samples Baca Street Well Site monitoring wells, not being sampled by PNM as part of Settlement Agreement, at the request of the City of Santa Fe. Samples indicate continued presence of contaminants of concern at the site, including elevated levels of nitrate not covered under the Settlement Agreement.
 - December 13, 2012: City of Santa Fe meets with NMED Ground Water Quality Bureau to discuss NMED'S April, 2012 sampling results. City of Santa Fe requests that Technical Advisory Group be convened.
 - January 7, 2013: NMED sends letter to Settlement Agreement parties asking for initiation of TAG to address issues of continued contamination at the site.
 - January 16, 2013: Technical Advisory Group reconvened. PNM, the City of Santa Fe and NMED in attendance.
 - August 1, 2014: PNM releases report by Hawley Geomatters, **"Hydrogeologic Framework of the PNM Santa Fe Generating Station Site and Surrounding Parts of Santa Fe, NM-with Emphasis on Hydrogeologic Controls on Groundwater Transport in the Vadose Zone and Saturated Zones.**
 - September 15, 2014: Last Technical Advisory Group meeting before PNM decides to enter CAF. Hawley Geomatters Report discussed. NMED and City of Santa Fe not in agreement with PNM that report shows that PNM is not a Potential Responsible Party for contamination at Baca Street site. NMED details options for further investigation of the site under the Groundwater Corrective Fund (CAF), as previously discussed at previous TAG meetings. PNM indicates that they will discuss options with PNM managers and legal staff. PNM commits to have an answer on PNM corporate's position to employ the CAF option within 2 weeks. That decision is not revealed until December.
 - December 19, 2014: Meeting between NMED, PNM and Santa Fe. PNM announces intent to enter CAF. Wants a MOU between PNM, NMED and City to nullify current 1992 Settlement Agreement and amendments. PNM to write first draft of MOU.
 - March 9, 2015: City of Santa Fe makes formal request to adjourn a TAG meeting in the absence of any new information about PNM's efforts to move the site into the CAF program. City maintains that TAG meetings should continue on a regular frequency until PNM enters CAF since site is still subject to 1992 Settlement Agreement and technical issues have not been resolved or new agreement reached as part of transitioning the site into CAF
 - March 23, 2015, NMED convenes a meeting, at the continued request of the City of Santa Fe. . PNM presents a draft MOU for the site for comment. NMED and City of Santa Fe provide comments at the meeting. NMED indicates that it does not want the MOU to be a three- party agreement with the City of Santa Fe, as a third party, since the agreement will cover required investigation and abatement of contaminants at the site pursuant to NMED regulations. NMED desires the MOU to be between NMED and PNM, with a separate agreement for access and cooperation signed between the City and PNM concurrently. The City of Santa Fe agrees with NMED. NMED and Santa Fe to submit further comments to PNM within two weeks of the meeting. Group will reconvene in a month to discuss new

draft to be prepared by PNM. In response to the comments submitted by NMED and the City of Santa Fe. A draft agreement covering PNM access and use of the well site will also be prepared by the City and PNM for review.