



## Multicultural Alliance for a Safe Environment

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February 18, 2014

NMED/GWQB Chief Jerry Schoeppner  
New Mexico Environment Department  
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**RE: MASE/BVDA Request for a Public Hearing on Draft Discharge Permit DP-200;  
Homestake Mining Company uranium mill and tailings site**

Chief Schoeppner:

The Multicultural Alliance for a Safe Environment (MASE) and the Bluewater Valley Downstream Alliance (BVDA) request that NMED/GWQB schedule a public hearing to discuss deficiencies in the supporting data and technical justification for the renewal and modification of DP-200.

MASE was formed six years ago as a coalition of grassroots organizations representing different cultures and communities that have been directly and disproportionately impacted by historic uranium production in the Grants Mineral Belt. This production took a devastating toll on our communities. Our air, land, and water have been contaminated, with adverse effects on human health and the environment.

MASE core groups currently include the Bluewater Valley Downstream Alliance (BVDA), Post-71 Uranium Workers Committee, Laguna-Acoma Coalition for a Safe Environment (LACSE), Eastern Navajo Dine Against Uranium Mining (ENDAUM), and Red Water Pond Road Community Association (RWPRCA).

The Bluewater Valley Downstream Alliance is composed of citizens residing in communities adjacent to the Homestake Superfund site. BVDA members have a long history of involvement with the mining industry corporations that left behind persistent plumes of ground water contamination and a toxic legacy of pollution. Both BVDA and MASE continue to work with the multiple agencies overseeing ground water remediation at the site.

The Bluewater Valley Downstream Alliance and MASE have participated in permit proceedings, public hearings, and numerous meetings with NMED, EPA, NRC and Homestake Mining Company over a combined total of approximately 30 years.

BVDA and MASE members will continue to suffer the long-term health and environmental impacts that should be addressed in draft DP-200. Murray Acres, a subdivision community within BVDA, operates a community irrigation system next to the Homestake site and will be directly impacted by the land application of contaminated ground water that is authorized in draft DP-200.

We do not agree with the relaxed background clean-up standards or the creation of a new category of contaminated groundwater called “low concentration” water proposed for reinjection with uranium concentrations at 1.0 mg/l, greatly exceeding the 0.16 mg/l currently established as an alluvial aquifer clean-up standard.

BVDA and MASE continue their objections to the use of alternative contaminant levels (ACLs) for the alluvial and Chinle aquifers because no opportunity for public input by the affected communities was provided when these standards were adopted. It is a basic tenet of environmental law and justice that communities should be afforded an opportunity to review and participate in the adoption of regulations that affect them. *National Environmental Policy Act, 42 U.S.C. 4321 et seq. (1969), Executive Order 12898 on Environmental Justice (1994)*

All the regulatory agencies with jurisdictional authority over the Homestake Superfund site are required to consider all applicable or relevant and appropriate requirements (ARARs) when a polluting entity is unable to comply with existing environmental regulations. In addition, the Homestake’s corrective action plan for ground water was never subjected to the Remedial Investigation/Feasibility Study process that is required for all Superfund sites on the National Priorities List. This means that the Homestake site has never undergone a comprehensive evaluation to determine the best methods for remediation and ultimate final closure.

Nor has NMED shared its written analysis of the permittee's discharge plan, or provided the updated plan on its website for public review and comment. Without this information, MASE and other members of the public are denied a meaningful opportunity to comment on the renewal and modification of DP-200.

MASE therefore requests that NMED defer action on the renewal and modification of DP-200 until the requested reports, studies and discharge plan have been made available for public review. *NMAC 20.6.2.3106C, F* Alternatively, in the absence of supporting data and studies that regulators need to adequately evaluate the effectiveness of Homestake’s ground water remediation program, MASE urges NMED/ GWQB to withdraw draft DP-200 so that appropriate conditions and background levels can be established.

For these reasons and other reasons identified below and in our attachments, MASE and BVDA request a public hearing on draft DP-200 to address these issues and all the contentions raised in their comments and recommendations, with attachments, attached to this hearing request. MASE furthers requests that the public hearing be scheduled

with at least 60 days notice so that MASE and our technical experts have adequate time to prepare for the hearing.

## **MASE Comments and Recommendations on Draft DP-200, with Attachments A-G**

### NMED Discharge Permits

NMED has informed MASE that it plans to process three discharge permits by June, 2014. In addition to DP-200, draft discharge permits will be issued for the Roca Honda Mine (DP-1717) and Mt. Taylor Mine (DP-61) during the first half of the year.

MASE strongly recommends that NMED make available its evaluation of each discharger's proposed plan covering "the methods or techniques the discharger proposes to use or processes expected to naturally occur which will ensure compliance with this Part," as required by NM Water Quality Control Commission rules. *NMAC 20.6.2.3106C; 20.6.2.3107*. In addition, each Permittee's complete discharge plan, with comments by other agencies should be made available for public review on NMED's website.

### Homestake's Discharge Plan

MASE recommends that Homestake's discharge plan should detail the methods, demonstrations, and techniques it proposes to provide for clean-up of damaged groundwater, before completion of a revised Draft DP-200 including:

- Reports that provide the basis for proposed increased pumping rates, reports on the effectiveness of and need for continued flushing of the tailings pile
- Reports on the performance of pilot tests for the full range of alternate technologies in operation or proposed for use or expansion in the future
- Reports on the likelihood of long-term geochemical rebound of contaminant concentrations after the end of flushing
- Reports on the evaluation of San Andres Glorieta Aquifers wells and possibility that faulty well construction has spread contamination into the San Andres aquifer
- Reports providing detailed information regarding operational flows, methods, and techniques for the life of the proposed Discharge Plan and other monitoring well data
- Procedures for detecting failure of Homestake's discharge systems

- Emergency plans and public notification in event of a contingency, such as tailings instability, pipeline breaks, RO facility shutdowns, evaporation pond leakage, or other system failures
- Underground Injection Control compliance permit compliance history
- Applicable or appropriate and relevant requirements (ARARs) for all contaminated aquifers at the Superfund site
- Evaluation of all monitoring well construction
- Evaluation of current evaporative pond capacity

This information should be covered in Homestake's proposed discharge plan and subjected to review and analysis by NMED and other regulatory agencies **prior** to publication of draft DP-200. This process will in turn allow meaningful public review and comment to take place following a comprehensive evaluation by appropriate regulatory agencies.

Additional defects and other comments are addressed in *Attachment A - provided by Paul Robinson, Addressing Groundwater Contamination from the Homestake Mining Company Tailings Site at Milan, NM.*

#### EPA Human Health Risk Assessment

EPA recently assessed the excess lifetime cancer risk to area residents at up to 5.6 times higher than the generally acceptable risk for combined exposures to soil, air and produce grown in the area. Excess cancer risks for radionuclides in water beneath the nearby subdivisions, primarily from radon-222 is 22 times higher than the generally acceptable risk, and is 18 times higher than the generally acceptable risk for radionuclides in ambient air. Radon-222 is one decay product of uranium. *EPA 2013 Final Draft Human Health Risk Assessment*

Although EPA has not yet finalized its draft assessment, the risk to our communities is ongoing. NMED's draft DP-200 does not address how Homestake's alternate ground water restoration methods will reduce the human health risks our environmental justice communities face on a daily basis. NMED's draft DP-200 should detail the measures that Homestake will take to reduce the combined radiological dangers to nearby residents from its Superfund site property.

Property values in the five subdivisions next to the Homestake site have been negatively impacted by these known dangers. Residents who are unable to sell their homes and leave the area are involuntarily subjected to increased risks from continuing exposure to radon-222 via multiple pathways, in effect sacrificing their health and that of their families. MASE is working to address these issues, as well as new uranium development projects that threaten our basic rights to a healthy and safe environment.

EPA's comments on draft DP-200 have not been shared with BVDA and MASE, the communities that will be most directly and disproportionately affected by the renewal of DP-200.

### Best Available Technology

The New Mexico State Engineer has required that Homestake's temporary water diversions "utilize the highest and best technology to assure conservation of water to the maximum extent practical." *OSE Permit No. 1605 & B-28 POD 1338* A determination that Homestake is using the best available technology for its groundwater remediation program cannot be made without a comprehensive analysis of the site's geohydrology, or an evaluation of Homestake's reverse osmosis treatment capacity, wellhead integrity, and mass capture of contaminants. NMED proposes to mandate these studies within a renewal of DP-200.

MASE and BVDA recommend that these studies be undertaken immediately by Homestake pursuant to its current discharge permit DP-200, pending renewal and modification. *NMAC 20.6.2.3106F* NMED should also take official notice of the evaluations performed by the Army Corps of Engineers (ACOE) and the Nuclear Regulatory Agency (NRC), in addition to Homestake's own quarterly, semi-annual, and annual reports. NMED has already proposed to accept Homestake's annual report to NRC, provided that the report includes compilations of all information required by NMED. *Draft DP-200, Conditions 59, 60*

Ongoing and intensified activities by Homestake under the current DP-200, with amendments, lends support to MASE's contention that NMED's oversight and evaluation of Homestake's activities under DP-200 are ongoing and that draft DP-200 requires additional information before a renewal and appropriate modifications can be considered.

### Use of the San Andres Formation

Homestake submitted several applications to the State Engineer (SE) to change the location of wells and to drill supplemental and replacement wells over the last several years. Homestake described the use of its wells for irrigation, pollution remediation, commercial and monitoring purposes. *Application Nos. 1605 & B-28 POD 499- POD 1337; POD 1338; POD 1339; POD 1340; POD 1341; POD 1342*

On June 19, 2008, the State Engineer renewed its 2002 approval of Homestake's application to temporarily divert 4,500 acre feet per year (AFY) of groundwater until December 31, 2017 "for pollution remediation purposes in accordance with Discharge Plan (DP-200) approved by the New Mexico Environment Department." *File No. B-28, #394494*

In 2012, the Office of the State Engineer permitted an unusually large number of supplemental wells (839) for Homestake Mining Company, in addition to 395 existing wells, for its flushing program and an alternative *in situ* treatment method. The permit also included 5 replacement wells into the Permian age San Andres/Glorieta aquifer and 194 infiltration lines that will use fresh or treated water to raise the water table and change the hydraulic gradient. *OSE Permit No. 1605 & B-28 POD 1338*

The OSE hydrologist assigned a relatively high transmissivity flow rate of 448,800 gpd/ft and a storage coefficient of 4E-4 to represent aquifer properties in the San Andres formation. *OSE Permit No. 1605 & B-28 POD 1338 - Dec. 13, 2011 Memo from Laura Petronis, OSE Hydrology Bureau (Attachment B)*

A San Andres formation subcrop located southwest of the Superfund site is in direct contact with the alluvial aquifer and should be monitored for contaminant migration from the Homestake site. MASE herein submits *Attachment C* and incorporates by reference *George Rice Comments addressing NMED/GWQB's Draft Groundwater DP-200 Renewal and Modification, dated January 21, 2014.*

MASE is concerned about possible contamination and depletion of the San Andres aquifer by HMC in DP-200 because the San Andres is the last remaining uncontaminated source of public water supply for the Villages of Bluewater, Milan, and the City of Grants. The San Andres-Glorieta aquifer also provides most of the recharge for the Rio San Jose, a critical agricultural resource for Acoma and Laguna.

MASE has attached the December 13, 2011 Memo from Laura Petronis, OSE Hydrology Bureau, referenced above as *Attachment B* and incorporates the memo by reference into these comments. The memo highlights additional information that is needed from Homestake in order to evaluate the effectiveness of its multiple restoration programs, due in part to Homestake's own uncertain plans for site restoration, well locations and pumping/injection rates.

Although Ms. Petronis did not anticipate any overall increase in Homestake's consumptive water use, she did not independently evaluate Homestake's claims that its alternate treatments will consume less than 1% of the total water pumped. She also assumed that all of Homestake's new pumping and injection wells were in close proximity to existing wells. She did not conduct a surface water depletion analysis based on her determination that there would be no increase in Homestake's diversion or depletion. It should be noted, however, that Homestake used less than half of its total diversionary right of 4,500 af/ from 2001- 2010.

A partial, rather than a complete, hydrologic evaluation was performed due to Homestake's use of alternate treatment methods. Despite the hydrogeological complexity of the Homestake site from faulting, variable aquifer properties, and dipping bedrock aquifers, OSE used its Theis equation program to determine drawdown effects from Homestake's alternate treatment methods. The Theis equation assumes a uniform

and continuous aquifer, which could lead to differences between actual and simulated drawdown.

A complete inventory and investigation of all well construction, including monitor wells, meters, and corresponding locations on the Superfund site property is required in order for NMED and other regulators to adequately evaluate the effectiveness of Homestake's flushing program. Information outlining a specific pumping schedule for Homestake's extraction and injection wells, metered flow rates and the purpose of each well is needed for NMED and other regulators to evaluate the effectiveness of each restoration method to be used by Homestake. This evaluation must take place **prior** to the renewal and modification of DP-200.

The terms of a new draft DP-200 should reflect the information acquired from this investigation, along with specific directives that will enable NMED and other regulators to track and assess the removal of mass contaminants from the site and to evaluate the effectiveness of the flushing program, in combination with alternative treatment methods.

#### End Land Application of Contaminated Water

NMED does not explain why it is allowing Homestake to restart its land application of contaminated groundwater for an additional 2 years. Condition 23 of the draft permit implies that it is a grace period for Homestake to increase its annual treatment capacity by the 129 million gallons of groundwater that it plans to discharge via land application.

Draft DP-200 permit authorizations address a combined discharge rate of 5,500 gpm for Homestake's reverse osmosis, zeolite bed, and electrocoagulation treatments. *DP-200, Discharge Authorization 1* It is unclear why Homestake requires additional treatment capacity at this time.

NMED's comments on Homestake's updated Corrective Action Plan (CAP) in March 2012 noted its concern with Homestake's practice of blending contaminated water with ground water from the San Andres aquifer to achieve alluvial ground water standards for the site. NMED required Homestake to demonstrate that continued land application of blended contaminated water will not result in any exceedance of site ground water standards in the future before it would allow land application to continue. *Attachment D, page 7* MASE attaches and incorporates by reference a *Technical Review of Homestake's Updated Corrective Action Program performed for MASE in October 2012 by James R. Kuipers, P.E., Kuipers and Associates LLC as Attachment D.*

Kuipers & Associates was doubtful that any land application discharge system could avoid exceedances when the discharge contains significant contaminant concentrations. NMED is proposing to use Table 4 concentrations, which would allow land application of uranium concentrations more than five times New Mexico water quality standards. Kuipers criticized Homestake's mass removal analysis of dissolved uranium because it did not account for losses to ground water outside of the modeled

plume. In fact, 50,000 kg of dissolved uranium mysteriously disappeared from the plume in Homestake's mass removal analysis. *Attachment D, page 8*

More background information needs to be collected and evaluated before a land application system is selected over other more environmentally acceptable alternatives. A survey of surface waters, ecology, and representative vegetation should be conducted, along with an ecological risk assessment. The hydrogeological characteristics of the site and groundwater quality should be assessed, and an anti-degradation water quality analysis should be performed. *Attachment D, pages 7- 8*

Draft DP-200 proposes some monitoring and data collection activities during land application operations until NMED approves Homestake's "demonstration that no long-term impacts to human health and the environment will result from this activity." *Conditions 39-46* The potential risks to human health and the environment from this type of contemporaneous demonstration activity are simply unacceptable to MASE and the communities we represent.

The use of passive or spray evaporation systems are recognized alternatives to land application that are routinely used throughout the mining industry and are readily available to Homestake. A two year grace period for Homestake to revive a now dormant activity in order to fully replace it, while simultaneously testing the practice for safety is nonsensical, and should be immediately replaced by evaporation alternatives that are readily available to Homestake.

On February 20, 2009, NMED/GWQB required Homestake to treat its land application water to WQCC standards, rather than alternate concentration limits, for 3 plots located outside the alluvial aquifer contamination plume. NMED's Draft DP-200 should specify whether the 2 plots approved for land application discharge activities in Sections 28 and 34 are located within the alluvial aquifer contamination plume and why it is requesting a closure plan for four land application plots. *Draft DP-200, Conditions 20-23, 64*

NMED's 2009 letter to Homestake also halted discharges from Homestake's P2 well to a stock pond located outside the alluvial aquifer plume. NMED directed Homestake to install a monitor well to determine if Homestake's discharges had resulted in saturated conditions at the stock pond and to characterize any resulting groundwater contamination.

NMED suggested that Homestake could alleviate the spread of contamination by blending P2 well water with cleaner water. Blending for the sole purpose of dilution is now prohibited by draft DP-200. *Condition 9* Draft DP-200 should address potential contamination of the stock pond from Homestake's P2 well as well as any enlargement of the alluvial aquifer contamination plume which could result from Homestake's discharges via land application.

NMED's draft DP-200 does not address Homestake's use of 194 infiltration lines, consisting of 400' segments of buried slotted pipe, to raise the water table and change

the hydraulic gradient using fresh water or treated water. NMED should evaluate whether the use of fresh water in the infiltration lines could constitute dilution, or whether use of the infiltration lines could lead to enlargement of the alluvial aquifer contamination plume.

NMED cannot escape the need to require more information from Homestake on how much water will be treated by each of its ground water treatment methods, and the mass of contaminants which will be removed by each method and within each aquifer, so that it can impose appropriate conditions for each treatment method.

### ACOE's Recommendation to End the Flushing Program

It is very likely that contamination from both the large and small tailing piles will eventually migrate from the unlined piles into the alluvial aquifer beneath them once the flushing program ends. The likelihood of this eventual "rebound" effect is one of the reasons that ACOE has recommended discontinuation of Homestake's flushing program. *ACOE Addendum Remediation System Evaluation Report (December 23, 2010), Executive Summary*

Besides recommending an end to Homestake's flushing program, ACOE's 2010 Final Addendum Report recommended that a rebound study should be initiated at the Homestake Superfund site. *Executive Summary, ACOE Final Addendum Report*

Other pertinent findings by the Corps are listed below:

- No readily apparent impacts to the San Andres/Glorieta aquifer have been observed, though supporting data is limited
- Treatment of irrigation water via ion exchange prior to land application is recommended to remove contaminants

NMED, on the other hand, is proposing to allow Homestake to increase the rate and volume of injection and dilution without a quantity limit on the use of freshwater. *DP-200, Paragraph 9* This constitutes an unprecedented expansion of Homestake's flushing program into the last remaining public water supply for the Bluewater Basin without supporting data, and prior to completion of the required studies. Homestake has provided no evidence that its current RO capacity, or evaporative capacity, can accommodate such an unlimited expansion based on flow rates and discharge volumes at its treatment facilities. NMED's proposal to allow this expansion is not supported by existing data or technical justification.

ACOE has further pointed out that Homestake's flushing program is unlikely to be completed by December 31, 2017, the date that its current temporary license to divert water from the San Andres formation will end. *OSE Permit No. 1605 & B-28, POD 1338*

Presently, Homestake's groundwater remediation program does not address the small tailings pile.

Additional comments and analysis are provided as *Attachment E Evaluation of Homestake Mining Company's Tailings Flushing Program and Seepage of Contaminants from the Large Tailings Pile: George Rice, February 16, 2014*

### Homestake's Proposed CAP Revision

MASE technical advisor George Rice drafted comments on behalf of MASE regarding the effectiveness of Homestake's flushing program to the Nuclear Regulatory Commission, which are attached hereto and incorporated by reference into these MASE comments for draft DP-200 as *Attachment F. Comments on the Grants Reclamation Project, Updated Corrective Action Program and Notes on RAls, October 30, 2012*

Mr. Rice's points out the need to address the long-term effectiveness of Homestake's flushing program and the possibility that contaminants from the Homestake site are migrating towards the San Andres/Glorieta subcrop, located approximately 2.5 miles southwest of the site.

Mr. Kuiper's review of Homestake's CAP for ground water (*Attachment D*) noted the need for inter-agency ARARs (applicable or relevant and appropriate requirements) to be considered by EPA and NMED, along with long-term monitoring and water-management activities at the site. Rice and Kuipers both agree that flushing appears to prolong, rather than expedite, draindown from the large tailings pile by keeping the tailings in a saturated condition.

To date, the NRC has not yet approved HMC's revised CAP, issued an environmental impact evaluation for the CAP, or provided the public with an opportunity to comment on the proposed revisions. Nor has the Homestake site ever been subjected to a full Remedial Investigation/Feasibility Study (RI/FS) process under the National Contingency Plan since it was placed on the National Priorities List (NPL) in 1983. Homestake began its ground water remediation activities in 1977, prior to its placement on the NPL.

Kuipers & Associates LLC recommends that a full RI/FS should be performed by EPA first - to determine the best methods for site remediation and ultimate final closure, and finally - to build the record necessary to support site deletion. Kuipers & Associates believe the existing remedial actions described in the CAP are not consistent with recognized best practice and agency approaches at other similar sites. Significant additional response actions and long-term institutional controls beyond those described in the CAP will most likely be necessary. *Attachment D, pages 3, 10*

MASE continues to assert that the only proven method to permanently clean up widespread groundwater contamination is to remove the mill tailings off-site to a licensed repository, or to isolate the tailings with both liners and covers. *Attachment D, pages 5-9* MASE recommends that Homestake's discharge plan provide a detailed analysis of these alternative long-term groundwater restoration methods in comparison to its current pump and treat method.

MASE also opposes the creation of another repository for contaminated sediments accumulated from groundwater treatment, in addition to the tailings piles on the Superfund site. *DP-200, Condition 25*

Permanent storage of the radioactive mill tailings and other recovered contaminants on-site will subject nearby resident communities and their property to continuing and unacceptable risks from radiological contaminants in ambient air, soil, and groundwater, and from local produce grown in the area.

### Alternative Treatment Methodologies

The alternative treatment methodologies which NMED/GWQB is proposing to incorporate into draft DP-200 may prove to be a futile effort. MASE attaches and incorporates by reference George Rice *Comments on Homestake Mining Company's Progress Summary for Microfiltration, LTP Tracer Testing, TPP Injections Research, CAP, DRP, Site-Wide Water Balance Tool, and Rebound Evaluation, 21, November 2013*, dated January 21, 2014 as *Attachment G*.

Homestake's zeolite pilot study test results exceeded the uranium site standard for the alluvial aquifer (0.16 mg/L) without further analysis of how the treatment could be used to achieve the site standard. Molybdenum and chloride levels exceeded the site standards goal in the electrocoagulation pilot study.

The results of Homestake's rebound evaluation indicate that the large tailing pile will continue to remain a source of groundwater contaminants into the foreseeable future. Mr. Rice points out that no explanation was provided for the target uranium concentration goal of 2 mg/L.

### Other required permits

NMED should provide a checklist for other regulatory permits required at the Homestake site in addition to the NRC approval of Homestake's CAP revision:

- NPDES (federal Clean Water Act) *NMAC 20.6.2.2001*
- Compliance history for Underground Injection Control permit at the Homestake site *NMAC 20.6.2.3106C(8)*
- Surface water quality management plan for the San Mateo Creek basin to assure compliance with New Mexico water quality standards *NMAC 20.6.2.3109H*

An anti-degradation analysis for the San Mateo Creek where the tailings piles are located should also be performed by NMED's Surface Water Branch.

### Environmental Justice

*Environmental Justice* is the fair treatment and meaningful involvement of all people in the development, implementation, and enforcement of environmental laws, regulations, and policies. It will be achieved when everyone - regardless of race, color, national origin, or income - enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process that ensures a healthy environment in which to live and work. *EPA Region 6 Environmental Justice Training Workshop, Albuquerque, NM, June 19-21, 2013; Executive Order 12898 on Environmental Justice*

Each of the core groups comprising MASE has suffered combined disproportionate burdens from uranium legacy contamination in the GMD for over five decades. Downstream communities have been subjected to hazardous, toxic releases first, from the UNC-Homestake Partners uranium mill and tailings site, and now, from ongoing contaminant releases into our air, water and soil at the Superfund site. BVDA resident Jonnie Head knows from personal experience that Homestake told residents to quit drinking their well water in 1975, and how Homestake's claims that contamination was confined to the shallow alluvial aquifer by the Chinle aquifers were wrong. Groundwater contamination has since spread to the Upper, Middle, and Lower Chinle aquifers.

In addition, community residents now face off-site migration of groundwater contaminants from the Department of Energy-owned Bluewater uranium mill tailings pile site west of the Homestake site and possible contaminant migration from the Ambrosia Lake area north of the site. Both additional contaminant sources are located upstream of the affected communities, in the Rio San Jose and San Mateo Creek watersheds. The combined cumulative adverse impacts to our communities from all uranium legacy sources of pollution must be considered by NMED and other state and federal regulators in order to achieve environmental justice for our communities.

EPA's Five-Year Plans for the addressing health and environmental impacts of uranium mining and milling in the Grants Mining District and the Navajo Nation can be utilized as a fulcrum point for inter-agency strategies to achieve comprehensive regional clean-up of uranium legacy and long-term environmental restoration.

### MASE Recommendations

MASE requests that NMED host more meetings with our communities, prior to the renewal and modification of DP-200, to address the recommendations we have listed below, such as:

- 1) Eliminate, or phase out, Homestake's flushing program and expanded use of the San Andres formation in DP-200 for flushing and blending/dilution purposes;
- 2) Monitor the San Andres formation subcrop located southwest of the Superfund site for contaminant migration;

- 3) Increase Homestake's RO treatment to maximum capacity relative to existing evaporative capacity;
- 4) Require that geohydrology, wellhead integrity, and mass contaminant removal studies be conducted immediately, prior to the renewal and modification of the current DP-200;
- 5) Invite public and inter-agency participation in the selection of ARARs for restoration of the alluvial, Upper, Middle, and Lower Chinle aquifers, including vanadium and molybdenum;
- 6) Halt the land application of contaminated groundwater that increases contaminant levels in the alluvial aquifer and the possibility of off-site excursions into adjacent subdivision lands; and
- 7) Develop an emergency response plan to cover contingencies, such as tailings instability, pipeline breaks, RO shutdowns, evaporation pond leakage, or other system failures with affected environmental justice communities.
- 8) Narrow the definition of "Freshwater" to exclude treated ground water that meets all applicable site ground water standards, which should be included in a new category titled "Treated Water".
- 9) Clarify whether the injection rate of fresh water and effluent into the large tailings pile is 450 gpm or 400gpm.
- 10) A minimum freeboard of two feet in all collection and evaporation ponds does not allow sufficient space for containment of emergency discharges that may occur due to system failures or other contingencies that may result from extreme weather events.

BVDA and MASE are willing to meet with Homestake and the Ground Water Quality Bureau to resolve some of the outstanding permit issues outlined in our comments and recommendations and to identify any remaining issues that will require a public hearing.

Respectfully submitted,

Susan Gordon  
Coordinator Multicultural Alliance for a Safe Environment  
On Behalf of MASE Core Groups:  
Bluewater Valley Downstream Alliance (BVDA)  
Post-71 Uranium Workers Committee  
Laguna-Acoma Coalition for a Safe Environment (LACSE)  
Eastern Navajo Dine Against Uranium Mining (ENDAUM)  
Red Water Pond Road Community Association (RWPRCA)

Cc: Scott Verhines, NM Office of the State Engineer  
Ron Curry, EPA Administrator, Region 6  
Mark Purcell, EPA Superfund Division (6SF-TR)  
John T. Buckley, U.S. Nuclear Regulatory Commission  
David Schafer, Department of Energy/Legacy Management  
Report to New Mexico Congressional Delegation