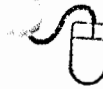




GARY E. JOHNSON  
GOVERNOR

State of New Mexico  
**ENVIRONMENT DEPARTMENT**

Ground Water Quality Bureau  
Harold Runnels Building  
1190 St. Francis Drive, P.O. Box 26110  
Santa Fe, New Mexico 87502-6110  
Telephone (505) 827-2918  
Fax (505) 827-2965



**ENTERED**



PETER MAGGIORE  
SECRETARY

PAUL R. RITZMA  
DEPUTY SECRETARY

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

July 11, 2000

Harry Davidson  
Acting Chief, Restoration Branch  
Environmental Management Division  
377 ABW/EM  
2050 Wyoming Blvd SE  
Building 20685, Suite 125  
Kirtland Air Force Base, New Mexico 87117-5270

RE: Conditional Approval of Stage 1 Abatement Plan, ST-106, Bulk Fuels Facility, Kirtland Air Force Base, New Mexico

Dear Mr. Davidson:

The Stage 1 abatement plan proposal, AP-28, for the site referenced above, was received by the New Mexico Environment Department (NMED) on April 24, 2000. The abatement plan proposal received by the Ground Water Quality Bureau (GWQB) included two parts: 1) a plan for the investigation of discharges of up to 97,600 gallons of JP-8 jet fuel reported to GWQB in November 1999; 2) a plan to perform a full site investigation of the Bulk Fuels Facility for undocumented historic releases which may have occurred at the site. GWQB has reviewed only the part of the proposal related to the November 1999 reported releases. The NMED Hazardous and Radioactive Materials Bureau (HRMB) will review the portion of the proposal that details the full site investigation. For further information about review of the full site investigation proposal, please contact Roland Rocha or Will Moats of HRMB at 846-0053 and 284-5086, respectively. All references to the Stage 1 abatement plan proposal throughout this letter hereby only refer to the portion of the proposal related to the November 1999 reported releases of JP-8 jet fuel.

The ST-106 Bulk Fuels Facility is located on the western side of Kirtland Air Force Base (KAFB) in Albuquerque, New Mexico. The site provides bulk storage of fuels, including diesel, gasoline, and JP-8 jet fuel. Three discharges of JP-8 were reported to GWQB in November 1999. The first discharge occurred on November 11, 1999, consisting of a hydrostatic pressure test failure of underground pipeline #22, a 14" diameter pipeline that is used with the JP-8 off-loading rack. The

KAFB3565



duration of the discharge is unknown because the length of time of the state of failure of pipeline #22 is unknown, but fuel inventory records for the 12 months preceding the date of the test indicate a loss of 97,171 gallons of JP-8. The second discharge occurred on November 12, 1999, and consisted of the failure of a cam-lock coupling during the hydrostatic pressure test of underground pipeline #23, a 14" diameter pipeline that is used with the JP-8 off-loading rack. The duration of this discharge was 2 to 3 minutes and 200 – 400 gallons of JP-8 were released onto surface soils. The third discharge occurred on November 13, 1999, and consisted of failure of underground pipeline #23 during a second hydrostatic pressure test, which was conducted after the cam-lock coupling had been repaired. The duration of the third discharge was about 30 seconds and approximately 30 gallons of JP-8 were discharged. The depth to ground water at this site is approximately 450 – 500 feet below ground level.

Pursuant to 20 NMAC 6.2, Water Quality Control Commission Regulations, Section 4109.A, the Stage 1 abatement plan proposal, AP-28, is hereby approved subject to the conditions listed below. In conditionally approving this abatement plan proposal, NMED has determined that the requirements of 20 NMAC 6.2, Section 4106.C.2-6 have been met.

Approval of this abatement plan does not relieve you of your responsibility to obtain third-party access, and to comply with any other applicable federal, state and/or local laws and regulations, such as zoning requirements and nuisance ordinances.

### **SUMMARY OF ABATEMENT PLAN REQUIREMENTS**

The terms and conditions of this approval contain specific requirements, as described in the abatement plan, which are summarized below:

1. A minimum of five (5) boreholes will be installed using direct-push or hollow-stem auger drilling techniques in the area of the 200-400-gallon and 30-gallon releases that occurred in November 1999. One boring will be located in the center of the area where the soils were stained by the discharge. The other four borings will be located approximately 50 feet to the north, south, east, and west of the central boring. If the horizontal extent of the contaminated area is not fully defined by these 5 borings, additional boreholes will be installed.
2. A minimum of seven (7) boreholes will be installed along the length of the 14"-diameter pipelines (#22 and #23). The borings will be spaced every 50 feet along the 300-ft length of the lines. Additional borings may be installed at tighter spacings if the findings suggest that the release location can be pinpointed.

3. At each boring location, soil samples will be collected at 5-foot intervals and field headspace analyses will be done using a photoionization detector (PID). Borings will be advanced until two consecutive soil samples display no visual contamination and no headspace reading. At each boring location, two soil samples will be selected and submitted for laboratory analyses. One sample will be collected from the maximum depth of the boring and the other sample will be collected from the interval that has the highest headspace reading on the PID.
4. Soil samples will be analyzed for total petroleum hydrocarbons (TPH) by EPA Method 8015-Modified, and for benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8020. Additionally, the sample with the highest TPH concentration from the area of the 200-400-gallon and 30-gallon releases and the sample with the highest TPH concentration from the investigation area along the pipelines will also be analyzed for semi-volatile organic compounds (SVOC's) by EPA Method 8270.
5. After drilling and sampling, boreholes will be abandoned by backfilling with uncontaminated soil cuttings and bentonite powder. All borehole locations will be surveyed. Contaminated soil cuttings will be transported to an approved facility or remediated at the site after approval of the NMED GWQB Pollution Prevention Section.
6. Available information on regional and site-specific geology, hydrogeology, and surface water hydrology will be collected and evaluated. Additionally, water wells within a 1-mile radius of the site will be inventoried and evaluated for potential impacts from the JP-8 releases.
7. If the soil investigation indicates that there may be impacts to ground water from the JP-8 releases, additional investigative work will be done.
8. The Stage 1 abatement plan investigation report will be submitted to GWQB upon completion. The projected submittal date is July 21, 2000.

### **CONDITIONS FOR APPROVAL**

This abatement plan approval is subject to the following conditions for the following reasons:

1. All abatement plan documents submitted to NMED must include the originally reported estimate of 97,171 gallons of JP-8 jet fuel from pipeline #22 until an actual determination is made of the amount discharged from the pipeline. The reason for this condition is to comply with 20 NMAC 6.2.4106.C.1.

2. KAFB verbally reported to GWQB that additional pipelines between the pump house and the aboveground JP-8 storage tanks were hydrostatically tested and passed their tests. Therefore, these lines are not part of the investigation area for the missing 97,171 gallons of JP-8. Written copies of these line test results should be provided to GWQB as part of the abatement plan. The reason for this condition is to provide justification for not including this area in the investigation.
3. KAFB must determine the full vertical and horizontal extents of the JP-8 discharges reported in November 1999. Especially in the area of pipelines #22 and #23, sampling only along the pipeline may not be sufficient to define the full 3-D extent of the contamination. The reason for this condition is to comply with 20 NMAC 6.2.4106.C.2.a.
4. If additional investigation of ground-water contamination is necessary, a proposal for that investigation must be submitted to GWQB as part of abatement plan AP-28. The reason for this condition is to comply with 20 NMAC 6.2.4106.C.
5. Page 2-5 of the abatement plan proposal describes excavation of 76 cubic yards of soil that were disposed of off-site. The following information about the soil removal activities must be provided to GWQB: the location of the excavation area; analytical results from any confirmatory samples or field measurements collected from the excavated materials or the bottom or sides of the excavation; and information about the offsite disposal, including the dates of the soil removal and disposal, the name of the facility that accepted the soil, the location of that facility, and all manifests that accompanied the transfer of soil. The reason for this condition is to comply with 20 NMAC 6.2.4112.
6. KAFB should provide copies of all documents related to abatement plan AP-28 to HRMB.

#### **GENERAL ABATEMENT PLAN REQUIREMENTS**

In addition to any other requirements provided by law, approval of abatement plan AP-28 is subject to the general requirements specified in 20 NMAC 6.2, Section 4107. This regulation provides for:

1. NMED entry, inspection and sampling at the Bulk Fuels Facility and on property under KAFB's control;
2. A minimum of four (4) days notification to NMED of sampling activities pursuant to this abatement plan.

3. Notification to NMED of sampling and well plugging, abandonment or destruction; and
4. Requirements for well plugging, abandonment or destruction.

### **ENFORCEMENT**

The requirements and provisions of this abatement plan are enforceable pursuant to § 74-6-10 NMSA 1978. Violations of this abatement plan may subject KAFB to a notice of violation, a compliance order, a compliance order assessing a civil penalty or an action in district court. Penalties assessed as part of a compliance order shall not exceed \$10,000 per day. Violations also may subject KAFB to NMED modification of this abatement plan pursuant to 20 NMAC 6.2, Section 4111.B.

### **MODIFICATIONS**

KAFB shall notify NMED, pursuant to 20 NMAC 6.2, Section 4111.A, of any proposed modifications to this approved plan and shall obtain NMED's written approval for such modifications. 20 NMAC 6.2, Section 4111.B also provides for possible future amendment of the abatement plan by NMED.

### **DISPUTE RESOLUTION AND RIGHT TO APPEAL**

If KAFB is dissatisfied with this action taken by NMED, KAFB may either initiate the dispute resolution procedures of 20 NMAC 6.2, Section 4113, or file a petition for hearing before the Water Quality Control Commission (WQCC) pursuant to 20 NMAC 6.2, Section 4114. Either request shall be made within thirty (30) days of the receipt of this letter. The notification of a dispute shall be by certified mail to the secretary of NMED. The petition for hearing shall be in writing to the WQCC. Unless a timely request for dispute resolution or hearing is made, the decision of NMED shall be final.


### **TRANSFER OF ABATEMENT PLAN**

Pursuant to 20 NMAC 6.2, Section 4104.B, at least 30 days prior to any transfer of ownership of this facility KAFB shall notify the transferee in writing that an abatement plan has been required or approved for this facility and shall deliver or send by certified mail to NMED a copy of such notification together with a certificate or other proof that such notification has in fact been received by the transferee.

Mr. Davidson, Conditional AP Approval, AP-28  
July 11, 2000  
Page 6

If you have any questions, please contact Jennifer Parker or Jim Mullany of my staff at (505) 827-0523 and (505) 827-0212, respectively.

Sincerely,

A handwritten signature in cursive script that reads "Dennis McQuillan for". The signature is written in black ink and is positioned above the typed name of the signatory.

Marcy Leavitt, Chief  
Ground Water Quality Bureau

ML:DM:jp

cc: Roland Rocha, NMED/HRMB  
Tito Madrid, NMED District 1 Acting Manager  
Jennifer Parker, Project Manager, GWQB  
Jim Mullany, Project Manager, GWQB