

Communication & Tracking Plan Deficiencies and Corrections Required

Attachment to Notice of Deficiency August 31, 2007

General

Submit two copies of the revised plan to your regional office within 15 days of receipt of the certified letter from the Director.

Place each plan in a clear front report cover such that it provides a full view of cover page, has 3 double-prong fasteners, five tab index, and a pocket to hold a mine map behind tab two. Do not submit ring binders.

Questions should be directed to your regional office or the web site www.wvminesafety.org

Tab 1 – Emergency Contact Information

In this section please modify your submittal to include a copy of your current mine general information form “GI” found at <http://www.wvminesafety.org/PDFs/GI1.pdf> appending on a separate page any of the following that is not included on that form:

Name of Mine	Phone# to the Communication Center
Mine Address	
Physical Location (driving directions from regional office)	If final selection not made include those being considered for the following:
Mine ID – State	
Mine ID – MSHA	Communication System Manufacturer(s)
	Communication System Vendor(s)
Company Responsible for the Plan	Contact Person
Contact Person	Emergency Phone #
Daytime Phone #	Email address
Emergency Phone #	
Email address	Tracking System Manufacturer(s)
	Tracking System Vendor(s)
General Manager/Superintendent Name	Contact Person
Daytime Phone #	Emergency Phone #
Emergency Phone #	Email address
Email address	
Safety Manager/Director	
Daytime Phone #	
Emergency Phone #	
Email address	

Tab 2 – Communication-Tracking System Description

The principle deficiencies under this tab related to only describing proposed new technology. The intent of 56-4 is that mines utilize all means in an integrated manner to enhance the likelihood of survival of some communication and tracking elements following a disaster.

In this section the description must contain ALL means of communication and tracking equipment along with administrative procedures currently in place or proposed and how they collectively interact to provide communication and tracking of miners during operations and following a disaster.

The information behind this tab shall describe existing and proposed communication-tracking system elements selected and provide an understanding of how all these elements work together to achieve compliance. This should include an overview of the communication-tracking system describing the structure and operations of the separate or integrated communication/tracking system(s) noting what changes to existing communication-tracking systems were required to comply with WV regulations, including but not be limited to:

- Allowing wireless tracking and wireless two way communications and tracking with each miner providing coverage in at least two separate air courses, at least one of which shall be an intake.
- Knowing the location of miners and direction of travel at key points in the escapeways, at a minimum at junctions (section, section-submain/mains intersections), so that all options of travel are covered and at distance not greater than half those between caches in escapeways. The statement should describe the criteria used in selecting these key points and coverage areas for tracking. Include a description of administrative procedures in place or proposed for checkin-checkout of individuals leaving a monitored tracking area.
- Providing examples of situations that might result in the loss of elements of the integrated communication and tracking infrastructure referring to specific locations on an included mine map. For each unique situation describe what steps are proposed to ensure survivability and/or provide for a redundant or alternative means of maintaining the communication and tracking capability. Situations of concern include but should not be limited to:
 - Potential fire source areas
 - Electrical equipment
 - Belts
 - Underground shops
 - Potential areas of explosive force pathways
 - Intersections of sealed areas
 - Intersections of completed sections
 - Potential ground control failure areas
 - Areas with known roof problems
 - Areas with known rib problems
 - Potential areas for impacts by mining equipment
 - Travel ways
 - Charging stations

Statement should be in sufficient detail that a reviewer can determine the propriety of the proposed solution and such that mine operators can use it as a template for similar situations as mining progresses.

- Providing an explanation of what steps are anticipated and what materials are pre-positioned to re-establish communication and tracking with miners who may become trapped in the event of a catastrophic disaster.
- A description of provisions made to maintain communication/tracking after loss of outside power for each of the components of the integrated communication and tracking system. The description should include details for de-powering any batteries by mine rescue teams if necessary. If power management schemes are to be employed to extend the life of backup batteries those should be described.
- A description of the communication system that is will be used in the shelter and provisions have been made to rapidly reestablish communication if lost in the accident.
- A current mine map with major communication and tracking components such that a reviewer can verify the appropriateness of the descriptions provided above. (maps do not need to be certified) Map should identify proposed zones and tracking points, path of any communication infrastructure, and the locations of amplifiers and/or nodes.

Tab 3 – Communication-Tracking System Operations

The principle deficiencies under this tab also related to only describing proposed new technology. Again, the intent of 56-4 is that mines utilize all means in an integrated manner to enhance the likelihood of survival of some communication and tracking elements following a disaster.

This tab should begin with a statement regarding how new elements of the communications and tracking system will be installed, tested and maintained. It should also discuss how these new elements will be incorporated into existing elements. This description should be in sufficient detail to allow a reviewer to determine the adequacy of the proposal and provide guidance for mine operational staff.

A combined listing of manufacturer’s checklists for each type of inspection, routine, relocation, annual, etc should be presented.

Included in this tab should be copies of the operating instructions for each component of the communication and tracking system to be provided for the miner and for emergency personnel. (Technical and repair instructions intended for technical staff should not be included)

If administrative measures are included in the communication and tracking system, such as checkin-checkout procedures, they also must be described here.

This section should describe the communication center and its operation in sufficient detail to allow a reviewer to determine the adequacy of the proposal and to orient communication center staff. The description should explain how the mine will be monitored at all times during which one or more miners are underground by providing:

- Details that the system allows the communication center operator to know the location of all miners, in relation to pre-determined points, immediately prior to an event by wireless tracking/locating device in the escape-ways, normal work assignments, or notification of the communication center
- Details on checkin and checkout procedures with the communication center by miners prior to entrance and exit from bleeders and remote or seldom used areas of the mine (all times shall be logged) and what the procedures are if they do not checkin at expected times
- Details for procedures for communication center operators during normal operations and in emergencies

Tab 4 – Training

The principle deficiencies under this tab also related to only describing proposed new technology. Again, the intent of 56-4 is that mines utilize all means in an integrated manner to enhance the likelihood of survival of some communication and tracking elements following a disaster. This tab was reordered to allow correspondence to be last.

Include updated content that demonstrates that all miners, supervisors and likely emergency responders shall be trained in the use, limitations and inter-operability of all components of the communication and tracking/locating system.

A statement indicating:

- the initial training dates for implementation of the communication-tracking system
- how the communication/tracking system will be incorporated in other required training, and
- where training shall be recorded to be made available upon request

Tab 5 – Correspondence

This tab was reordered to place it at the end and include all correspondence associated with the plan.

This section should contain copies of transmittal letters to WV OMHS&T, copies of any deficiency received, and copies of approvals.

Following approval copies of purchase orders showing operational dates that were submitted to the OMHS&T regional office should be inserted. These include a copy of purchase orders for any necessary items or services required to implement the emergency communication-tracking plan. At the minimum this should be communication-tracking equipment, installation, and routine and emergency maintenance services. If the operator is doing these things in-house then proof of qualified staff and available equipment is required.

The documents should specify the following:

- Order date:
- Delivery date:
- Operational Date: