

## **SUPPORTING STATEMENT**

Refuse Piles and Impoundment Structures, Recordkeeping and Reporting Requirements (pertains to surface coal mines and surface work areas of underground coal mines), 30 C.F.R. §§ 77.215(j), 77.215-2, 77.215-3, 77.215-4, 77.216-2, 77.216-3, 77.216-4, and 77.216-5

### **A. Justification**

**1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.**

Sections 101(a) and 508 of the Federal Mine Safety and Health Act of 1977 (P.L. 95-164)(the Act), 30 U.S.C. §§ 811 and 957, authorize the Secretary to develop, promulgate, and revise improved health or safety standards for the protection of life and the prevention of injuries in coal or other mines, and to issue such regulations as deemed necessary to carry out the provisions of the Act.

30 C.F.R. pt. 77, Subpart C, sets forth regulations for surface installations. More specifically, the sections cited in the title of this supporting statement addresses refuse piles (30 C.F.R. § 77.215), and impoundments (30 C.F.R. § 77.216). Impoundments are structures that can impound water, sediment, or slurry or any combination of materials; and refuse piles are deposits of coal mine waste (other than overburden or spoil) that are removed during mining operations or separated from mined coal and deposited on the surface. The failure of these structures can have a devastating affect on a community. To avoid or minimize such disasters, standards have been promulgated for the design, construction and maintenance of these structures, for annual certifications, for certification for hazardous refuse piles, for the frequency of inspections, and the methods of abandonment for impoundments and impounding structures.

**2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.**

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MSHA reviews impoundment and refuse pile plans for safety concerns and based on the evaluation of geotechnical, hydrologic, hydraulic and other engineering data, approves plans that are determined to be adequate. The mine operators use the approved plans and approved revisions to plans for constructing and improving impoundment structures and refuse piles. In addition, MSHA reviews fire extinguishing plans as well as abandonment plans for impoundments and refuse piles to ensure that they conform with prudent engineering and safety practices, and when implemented will prevent or eliminate hazardous conditions.

MSHA reviews the annual status report in order to determine that the structure is being constructed, operated and maintained according to the approved engineering plan. The annually required certification by a registered professional engineer affirms that the dam is being built, operated and maintained according to the approved plan. Annual reporting requirements also indicate any changes which have affected the stability or operation of the impounding structure during the reporting period.

The weekly physical examination and instrument monitoring are required in order to determine whether any signs of instability have developed and whether safety features such as spillways are in proper operating condition. Hazardous conditions or inoperable design features can be detrimental to the safety of the structure and subsequently dangerous to any miners or inhabitants downstream. Weekly instrument records show fluctuations of such important factors as the dam's internal saturation level, which has a direct affect on the stability of the structure. To minimize the information collection, with respect to impoundments, the most recent regulation changes allow operators to apply for longer inspection intervals for sites with low-hazard potential that have an established record of safe performance.

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.**

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No improved information technology has been identified that would reduce the burden. However in order to comply with the Government Paperwork Elimination Act, mine operators may retain the records using whatever method they choose, which may include utilizing computer technology.

With respect to refuse piles, reports contain, among other things, a topographic map showing the present and proposed maximum extent of the refuse pile and an area 500 feet around the perimeter; a statement of whether or not the refuse pile is burning; a description of measures taken to prevent water from being impounded by the refuse pile or contained within; a cross section of the length and width of the refuse pile at intervals to show the approximate original ground surface and any other information pertaining to the stability of the pile.

With respect to impoundments, reports contain, among other things, changes in the geometry of the impounding structure for the reporting period; data showing the minimum, maximum and present depth of the impoundment; the storage capacity of the impounding structure; and the volume of the impounded water, sediment, or slurry for the reporting period. Because the drawings are large, mine operators send in hard copies.

**4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item 2 above.**

MSHA has reviewed its regulatory position with the Office of Surface Mining (OSM), U.S. Department of the Interior, and the Environmental Protection Agency. As a result of this review, it was determined that there was no duplication in the reporting and record keeping burden imposed by these agencies. MSHA met with representatives of OSM prior to promulgation of its regulations to assure that there was no conflict.

**5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-I), describe any methods used to minimize burden.**

This information does not have a significant impact on small businesses or other small entities.

**6. Describe the consequence to Federal program or policy activities if the**

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collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.

If MSHA eliminated or reduced its collection, review and certification of construction or abandonment plans, or reduced its requirements for inspections and monitoring of instruments, unsafe conditions could go undetected. This could quickly result in detrimental conditions for the dam or refuse pile and subsequently threaten the safety of miners on mine property, as well as members of the public living near or downstream of the structures.

7. Explain any special circumstances that would cause an information collection to be conducted in a manner:

- requiring respondents to report information to the agency more often than quarterly;
- requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;
- requiring respondents to submit more than an original and two copies of any document;
- requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years;
- in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;
- requiring the use of a statistical data classification that has not been reviewed and approved by OMB;
- that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or
- requiring respondents to submit proprietary trade secret, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

In the event of a mine emergency, the mine operator may have to provide MSHA with reporting information more frequently than quarterly. This collection of information is otherwise consistent with the guidelines in 5 C.F.R. § 1320.5.

8. If applicable, provide a copy and identify the data and page number of publication in the Federal Register of the agency's notice, required by 5 CFR Section 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

Describe efforts to consult with persons outside the agency to obtain their views

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on the availability of data, frequency of collection, the clarity of instructions and record keeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years -- even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.

MSHA published a 60-day preclearance Federal Register notice on January 15, 2008 (Vol 73, Number 10, page 2544), soliciting public comments regarding the extension of this information collection. One comment Pennsylvania Department of Environmental Protection received thanking MSHA for giving them the opportunity to submit comments.

9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.

MSHA does not provide payments or gifts to respondents.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

There is no assurance of confidentiality provided to respondents.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

There are no questions of a sensitive nature.

12. Provide estimates of the hour burden of the collection of information. The statement should:

- Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for

- customary and usual business practices.
- If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens in Item 13 of OMB Form 83-I.
- Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included in Item 13.

MSHA's records show that in FY 2004, there were approximately 646 impounding structures and 46 hazardous refuse piles, for a total of 692 sites.

Approximately 5 percent of plans or revisions are developed by a mining company engineer, who earns an average of \$70.07/hour (based on data from U.S. Coal Mine Salaries, Wages, & Benefits - 2006 Survey Results-Composite Coal Surface and Underground Supervisory rate).

The majority of new plans and plan revisions are prepared by contract engineering firms. MSHA experience is that 95 percent of the engineering studies, testing, and designs are provided through contractors. Those costs are provided in Item 13.

The burden hours and cost estimates for the 5 percent of all annual impoundment and refuse pile plan requirements completed by the coal mining industry were computed as follows:

Impoundment Plans, Refuse Pile Plans, and Revisions:

(1)MSHA estimates that there are 74 new impoundment plans a year and it takes 1,300 hours to prepare a new impoundment plan. There are 4 new plans submitted per year ( $74 \times 5\% = 4$ ) that are not prepared by contractors.

(2)MSHA estimates that there are 20 new refuse pile plans submitted per year, and it takes 16 hours for a new refuse pile plan. There will be one non-contractor ( $20 \times 5\% = 1$ ) new refuse pile plan submitted per year.

(3)MSHA estimates that there will be 115 revised impoundment plans and it takes 40 hours to prepare a revision to an existing impoundment plan. There will be 6 ( $115 \times 5\% = 6$ ) revisions submitted per year not completed by a third-party contractor.

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4 new impoundment plans/yr x 1,300 hours	=	5,200 hours
1 new refuse pile plans/yr x 16 hours	=	16 hours
6 revised impoundment plans/yr x 40 hours	=	240 hours
<b>Total Burden Hours</b>		<b>5,456 hours</b>

5,456 hours x \$70.07/hr = \$382,302

Fire Extinguishing Plans: This is not a significant category. There have not been refuse facility or impoundment fires reported in several years. Controlled compaction and exclusion of combustible materials from the fills have all but totally eliminated the spontaneous ignition of fires. The few remaining events have been trespassers or vandals starting fires in old un-reclaimed mined areas. For the purposes of estimating the burden of such an event MSHA estimates that a fire in constructed refuse pile or impoundment bank constructed from refuse occurs once every 4 years. The engineering consists primarily of preparing a plan for exposing the burning materials by excavating with dozers for submittal to an MSHA district manager. An engineer or supervisor should be able to complete an acceptable document in approximately 20 hours.

1 event x 1 event/4 years x 20 hours = 5 hours

5 hrs. x \$70.07 per engineering hour = \$350

Abandonment Plans: MSHA estimates that an average of 25 abandonment plans are developed each year, and that it takes 8 hours to prepare such a plan by a company engineer.

25 abandonment plans x 8 hours/plan	=	200 hours
200 hours x \$70.07/hr	=	\$14,014

Annual Status Report and Certification: MSHA estimates that there are 646 active impoundments and 46 active refuse piles which require annual reporting or annual certification. MSHA regulations allow contractors with registered engineers to submit the annual reports on behalf of their clients. As previously discussed, 95 percent of these large scale earth structures are designed by contract engineering firms. The execution of those designs is usually monitored by the design engineers who then complete the annual report. Therefore, mine

operators address only about 35 (692 x 5%) annual reporting or certifications for impoundments and refuse piles. Such revisions would take a company engineer approximately 2 hours per report.

35 annual reports / certifications x 2 hours	=	<b>70 hours</b>
70 hours x \$70.07/hr	=	\$4,905

Recordkeeping Associated With Weekly Inspections and Instrumentation Monitoring: MSHA's regulations require that coal mine operators have a "qualified person" inspect their impoundments for signs of instability every seven days, unless a longer inspection interval is approved by the District Manager. Longer inspection intervals are normally only approved for low-hazard potential impoundments with a record of safe performance. Considering the total population of regulated impoundments, it is estimated that, as an overall average, inspections are required to be performed every 3 weeks or 17 times per year.

MSHA estimates that a qualified person who inspects an impoundment earns approximately \$30.27/hour (based on data from U.S. Coal Mine Salaries, Wages, & Benefits - 2006 Survey Results for a combination of surface and underground miners). It is estimated that the inspections where mine operators have installed monitoring instruments will take an average of 3 hours every 3 weeks (17 inspections per year) to perform this function. Sites without monitoring instruments will be able to be inspected and recorded in approximately 2 hours every 3 weeks (17 inspections per year). An estimated 40 percent, or 258 sites of the total 646, have monitoring instruments installed.

258 impoundments w/monitoring instruments		
x 17 insp./yr. X 3 hours	=	13,158 hrs

13,158 hours x \$30.27/hr	=	\$398,293
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388 impoundments w/o monitoring instruments		
x 17 insp./yr x 2 hours	=	13,192 hrs

13,192 hours x \$30.27/hr	=	\$399,392
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Cite/ Reference	Number of Respondents	Annual Responses	Average Time per Response	Annual Burden Hours
77.215 New Refuse Piles	1	1	16	16
Abandonment Plans	25	25	8	200
77.216 New Impoundments	4	4	1,300	5,200
Revisions	6	6	40	240
Fire Extinguisher Plans	1	.25	20	5
Annual Certifications (existing)	35	35	2	70
Inspections w/monitoring Instruments	258	4,386	3	13,158
w/o monitoring Instruments	388	6,596	2	13,192
<b>TOTALS</b>	/////	<b>11,054</b>	/////	<b>32,081</b>

**TOTAL BURDEN HOURS = 32,081**  
**TOTAL BURDEN HOUR COST: = \$1,198,765**

13. Provide an estimate of the total annual cost burden to respondents or record-keeper resulting from the collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14).

- The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life); and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for

collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.

- If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.
- Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.

The work involved in the testing, design engineering, construction monitoring and annual reporting for new impoundments, hazardous refuse piles and major addition and revision to existing projects is generally beyond the on-site resources of a mine operator and is, as a consequence, contracted to specialty contract engineering firms. MSHA anticipates that 95 percent of all work in preparing plans submitted for MSHA District Manager approval is done by contract engineering firms. MSHA estimates that an average hourly cost for contract engineering ranges from \$100 per hour for the principal engineers to \$45 per hour for engineering technicians. MSHA estimates \$70 per hour to be a representative average fee.

#### Estimated Contractor Engineering Costs:

74 new impoundment plans x 95% x 1300 hours x \$70 / hour	= \$6,397,300
20 new refuse pile plans x 95% x 16 hours x \$70/hour =	\$21,280
115 revisions to plans x 95% x 40 hours x \$70 / hour =	\$305,900
692 annual reports or certifications less 35 by mine operators x 2 hours x \$70 / hour	= \$91,890
Total Cost	= \$6,816,460

14. Provide estimates of annualized cost to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information. Agencies also may aggregate cost estimates from Items 12, 13, and 14 in a single table.

The average hourly wage for an MSHA specialist (GS-12/5) is \$30.57/hour (based on Office of Personnel Management, 2007 General Schedule). MSHA estimates that it takes a specialist approximately 2 hours to perform an administrative review of an average report for an impoundment or a hazardous refuse pile. In addition, the plans are carefully evaluated by the MSHA's Technical Support Branch.

Technical Support Review of Impoundment Plans, Refuse Pile Plans, and Revisions:

(1) MSHA estimates that it takes 1 month (160 hours) to review and approve an average impoundment plan, and 74 new impoundment plans are received per year.

(2) It takes approximately 30 hours to review a revision to an existing impoundment plan, and 115 revisions are submitted per year.

(3) A review of refuse pile plans is estimated to take approximately 2 hours, and 20 new plans are received per year.

74 new plans/yr x (2 hours admin review + 160 hours tech support review = 162 hours)	=	11,988 hours
11,988 hours x \$30.57/hr	=	\$366,473
115 revisions/yr x (2 hours admin review + 30 hours tech support review = 32 hours)	=	3,680 hours
3,680 hours x \$30.57/hr	=	\$112,498
20 new refuse piles/yr x 2 hours	=	40 hours
40 hours x \$30.57/hr	=	\$1,223

Abandonment Plans: MSHA receives an average of 25 abandonment plans per year. Safety specialists estimate that it takes approximately 1 hour to review and prepare a response for one of these plans. Therefore:

25 reports x 1 hour	=	25 hours
25 hours x \$30.57/hr	=	\$764

Annual Status Report and Certification: 646 existing

impoundments and 46 existing refuse piles will undergo changes that are required to be reported. The review will take approximately 1 hour per report.

692 reports x 1 hour	=	692 hours
692 x \$30.57/hr	=	\$21,154
 TOTAL FEDERAL HOURS	 =	 16,425 hours
FEDERAL COST GRAND TOTAL	=	\$502,112

**15. Explain the reasons for any program changes or adjustments reporting in Items 13 or 14 of the OMB Form 83-I.**

MSHA records show a slight decrease in the number of new plans submitted for approval and a decrease in the number of revisions to impoundment plans. The number of active impoundments declined by 78 (from 770 to 692) impoundments primarily due to an industry effort to keeping existing facilities in operation longer by increasing the elevation and capacity for refuse disposal at impoundments rather than developing new sites because of the relative scarcity of suitable locations. Another aspect contributing to the declining number of active impoundments is the improvements in MSHA computer based inventory. The MSHA Impoundments and Refuse Pile Inventory (IRPI) has identified and eliminated duplicate reporting. The inventory numbers are now much more reliable with the districts providing data in a consistent format. The number of responses also decreased by 1,601 (from 12,655 to 11,054). Consequently, burden hours decreased by 3,850 (from 35,931 to 32,081) due to a slight reduction in the number of new impoundment plans or major revisions to existing impoundments. This burden estimate also continues to recognizing that 95 percent of the engineering work associated with impoundments and refuse pile is done by contract engineering firms. Consequently, this resulted in MSHA assessing a slight decrease of \$555,660 (from \$7,372,120 to \$6,816,460) burden cost.

**16. For collections of information whose results will be published, outline plans for tabulation, and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.**

MSHA does not intend to publish the results of this information collection.

**17. If seeking approval to not display the expiration date for OMB approval of**

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the information collection, explain the reasons that display would be inappropriate.

MSHA is not seeking approval to not display the expiration date for OMB approval of this information collection.

18. Explain each exception to the certification statement identified in Item 19, "Certification for Paperwork Reduction Act Submission," of OMB 83-I.

MSHA is not requesting an exception to the certification statement.

## **B. Collection of Information Employment Statistical Methods**

Collection of information does not employ statistical methods.

**Federal Mine Safety & Health Act of 1977,  
Public Law 91-173,  
as amended by Public Law 95-164\***

# An Act

**TITLE I--GENERAL  
MANDATORY SAFETY AND HEALTH STANDARDS**

SEC. 101. (a) The Secretary shall by rule in accordance with procedures set forth in this section and in accordance with section 553 of title 5, United States Code (without regard to any reference in such section to sections 556 and 557 of such title), develop, promulgate, and revise as may be appropriate, improved mandatory health or safety standards for the protection of life and prevention of injuries in coal or other mines.

**REGULATIONS**

SEC. 508. The Secretary, the Secretary of Health, Education, and Welfare, and the Panel are authorized to issue such regulations as each deems appropriate to carry out any provision of this Act.

## 30 CFR § 77.215

**Refuse piles; construction requirements.**

(j) All fires in refuse piles shall be extinguished, and the method used shall be in accordance with a plan approved by the District Manager. The plan shall contain as a minimum, provisions to ensure that only those persons authorized by the operator, and who have an understanding of the procedure to be used, shall be involved in the extinguishing operation.

**30 CFR § 77.215-2****Refuse piles; reporting requirements.**

(a) The proposed location of a new refuse pile shall be reported to and acknowledged in writing by the District Manager prior to the beginning of any work associated with the construction of the refuse pile.

(b) Before May 1, 1976, for existing refuse piles, or within 180 days from the date of acknowledgment of the proposed location of a new refuse pile, the person owning, operating or controlling a refuse pile shall submit to the District Manager a report in triplicate which contains the following:

(1) The name and address of the person owning, operating or controlling the refuse pile; the name associated with the refuse pile; the identification number of the refuse pile as assigned by the District Manager; and the identification number of the mine or preparation plant as assigned by MSHA.

(2) The location of the refuse pile indicated on the most recent USGS 7 1/2 minute or 15 minute topographic quadrangle map, or a topographic map of equivalent scale if a USGS map is not available.

(3) A statement of the construction history of the refuse pile, and a statement indicating whether the refuse pile has been abandoned in accordance with a plan approved by the District Manager.

(4) A topographic map showing at a scale not to exceed 1 inch=400 feet, the present and proposed maximum extent of the refuse pile and the area 500 feet around the proposed maximum perimeter.

(5) A statement of whether or not the refuse pile is burning.

(6) A description of measures taken to prevent water from being impounded by the refuse pile or contained within the refuse pile.

(7) At a scale not to exceed 1 inch=100 feet, cross sections of the length and width of the refuse pile at sufficient intervals to show the approximate original ground surface, the present configuration and the proposed maximum extent of the refuse pile, and mean sea level elevations at significant points.

(8) Any other information pertaining to the stability of the pile which may be required by the District Manager.

(c) The information required by paragraphs (b)(4) through (b)(8) of this section shall be reported every twelfth month from the date of original submission for those refuse piles which the District Manager has determined can present a hazard until the District Manager notifies the operator that the hazard has been eliminated.

(Secs. 101, 508, Pub. L. 91-173, 83 Stat. 745, 803 (30 U.S.C. 811, 957), Pub. L. No. 96-511, 94 Stat. 2812 (44 U.S.C. 3501 et seq.))

[40 FR 41776, Sept. 9, 1975, as amended at 47 FR 14696, Apr. 6, 1982; 57 FR 7471, Mar. 2, 1992; 60 FR 33719, June 29, 1995]

### **30 CFR § 77.215-3**

#### **Refuse piles: certification.**

(a) Within 180 days following written notification by the District Manager that a refuse pile can present a hazard, the person owning, operating, or controlling the refuse pile shall submit to the District Manager a certification by a registered engineer that the refuse pile is being constructed or has been modified in accordance with current, prudent engineering practices to minimize the probability of impounding water and failure of such magnitude as to endanger the lives of miners.

(b) After the initial certification required by this section and until the District Manager notifies the operator that the hazard has been eliminated, certification shall be submitted every twelfth month from the date of the initial certification.

(c) Certifications required by paragraphs (a) and (b) of this section shall include all information considered in making the certification.

(Secs. 101, 508, Pub. L. 91-173, 83 Stat. 745, 803 (30 U.S.C. 811, 957))

[40 FR 41776, Sept. 9, 1975, as amended at 57 FR 7471, Mar. 2, 1992]

### **30 CFR § 77.215-4**

#### **Refuse piles; abandonment.**

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When a refuse pile is to be abandoned, the District Manager shall be notified in writing, and if he determines it can present a hazard, the refuse pile shall be abandoned in accordance with a plan submitted by the operator and approved by the District Manager. The plan shall include a schedule for its implementation and describe provisions to prevent burning and future impoundment of water, and provide for major slope stability.

(Secs. 101, 508, Pub. L. 91-173, 83 Stat. 745, 803 (30 U.S.C. 811, 957), Pub. L. No. 96-511, 94 Stat. 2812 (44 U.S.C. 3501 et seq.))

[40 FR 41776, Sept. 9, 1975, as amended at 47 FR 14696, Apr. 6, 1982; 60 FR 33719, June 29, 1995]

### **30 CFR § 77.216-2**

#### **Water, sediment, or slurry impoundments and impounding structures; minimum plan requirements; changes or modifications; certification.**

(a) The plan specified in [§77.216](#), shall contain as a minimum the following information:

(1) The name and address of the persons owning, operating or controlling the impoundment or impounding structure; the name associated with the impoundment or impounding structure; the identification number of the impounding structure as assigned by the District Manager; and the identification number of the mine or preparation plant as assigned by MSHA.

(2) The location of the structure indicated on the most recent USGS 7 1/2 minute or 15 minute topographic quadrangle map, or a topographic map of equivalent scale if a USGS map is not available.

(3) A statement of the purpose for which the structure is or will be used.

(4) The name and size in acres of the watershed affecting the impoundment.

(5) A description of the physical and engineering properties of the foundation materials on which the structure is or will be constructed.

(6) A statement of the type, size, range, and physical and engineering properties of the materials used, or to be used, in constructing each zone or stage of the impounding structure; the method of site preparation and construction of each zone; the approximate dates of construction of the structure and each successive stage; and for existing structures, such history of construction as may be available, and any record or knowledge of structural instability.

- (7) At a scale not to exceed 1 inch=100 feet, detailed dimensional drawings of the impounding structure including a plan view and cross sections of the length and width of the impounding structure, showing all zones, foundation improvements, drainage provisions, spillways, diversion ditches, outlets, instrument locations, and slope protection, in addition to the measurement of the minimum vertical distance between the crest of the impounding structure and the reservoir surface at present and under design storm conditions, sediment or slurry level, water level and other information pertinent to the impoundment itself, including any identifiable natural or manmade features which could affect operation of the impoundment.
- (8) A description of the type and purpose of existing or proposed instrumentation.
- (9) Graphs showing area-capacity curves.
- (10) A statement of the runoff attributable to the probable maximum precipitation of 6-hour duration and the calculations used in determining such runoff.
- (11) A statement of the runoff attributable to the storm for which the structure is designed and the calculations used in determining such runoff.
- (12) A description of the spillway and diversion design features and capacities and calculations used in their determination.
- (13) The computed minimum factor of safety range for the slope stability of the impounding structure including methods and calculations used to determine each factor of safety.
- (14) The locations of surface and underground coal mine workings including the depth and extent of such workings within the area 500 feet around the perimeter, shown at a scale not to exceed one inch=500 feet.
- (15) Provisions for construction surveillance, maintenance, and repair of the impounding structure.
- (16) General provisions for abandonment.
- (17) A certification by a registered engineer that the design of the impounding structure is in accordance with current, prudent engineering practices for the maximum volume of water, sediment, or slurry which can be impounded therein and for the passage of runoff from the designed storm which exceeds the capacity of the impoundment; or, in lieu of the certification, a report indicating what additional investigations, analyses, or improvement work are necessary before such a certification can be made, including what provisions have been made to carry out such work in addition to a schedule for completion of such work.
- (18) Such other information pertaining to the stability of the impoundment and impounding structure which may be required by the District Manager.

(b) Any changes or modifications to plans for water, sediment, or slurry impoundments or impounding structures shall be approved by the District Manager prior to the initiation of such changes or modifications.

(Secs. 101, 508, Pub. L. 91-173, 83 Stat. 745, 803 (30 U.S.C. 811, 957))

[40 FR 41777, Sept. 9, 1975]

### **30 CFR § 77.216-3**

#### **Water, sediment, or slurry impoundments and impounding structures; inspection requirements; correction of hazards; program requirements.**

(a) All water, sediment, or slurry impoundments that meet the requirements of [§77.216\(a\)](#) shall be examined as follows:

(1) At intervals not exceeding 7 days, or as otherwise approved by the District Manager, for appearances of structural weakness and other hazardous conditions.

(2) All instruments shall be monitored at intervals not exceeding 7 days, or as otherwise approved by the District Manager.

(3) Longer inspection or monitoring intervals approved under this paragraph (a) shall be justified by the operator based on the hazard potential and performance of the impounding structure, and shall include a requirement for inspection immediately after a specified rain event approved by the District Manager.

(4) All inspections required by this paragraph (a) shall be performed by a qualified person designated by the person owning, operating, or controlling the impounding structure.

(b) When a potentially hazardous condition develops, the person owning, operating or controlling the impounding structure shall immediately:

(1) Take action to eliminate the potentially hazardous condition;

(2) Notify the District Manager;

(3) Notify and prepare to evacuate, if necessary, all coal miners from coal mine property which may be affected by the potentially hazardous conditions; and

(4) Direct a qualified person to monitor all instruments and examine the structure at least once every eight hours, or more often as required by an authorized representative of the Secretary.

(c) After each examination and instrumentation monitoring referred to in paragraphs (a) and (b) of this section, each qualified person who conducted all or any part of the examination or instrumentation monitoring shall promptly record the results of such examination or instrumentation monitoring in a book which shall be available at the mine for inspection by an authorized representative of the Secretary, and such qualified person shall also promptly report the results of the examination or monitoring to one of the persons specified in paragraph (d) of this section.

(d) All examination and instrumentation monitoring reports recorded in accordance with paragraph (c) of this section shall include a report of the action taken to abate hazardous conditions and shall be promptly signed or countersigned by at least one of the following persons:

- (1) The mine foreman;
- (2) The assistant superintendent of the mine;
- (3) The superintendent of the mine;
- (4) The person designated by the operator as responsible for health and safety at the mine.

(e) Before May 1, 1976, the person owning, operating, or controlling a water, sediment, or slurry impoundment which meets the requirements of [§77.216\(a\)](#) shall adopt a program for carrying out the requirements of paragraphs (a) and (b) of this section. The program shall be submitted for approval to the District Manager. The program shall include as a minimum:

- (1) A schedule and procedures for examining the impoundment and impounding structure by a designated qualified person;
- (2) A schedule and procedures for monitoring any required or approved instrumentation by a designated qualified person;
- (3) Procedures for evaluating hazardous conditions;
- (4) Procedures for eliminating hazardous conditions;
- (5) Procedures for notifying the District Manager;
- (6) Procedures for evacuating coal miners from coal mine property which may be affected by the hazardous condition.

(f) Before making any changes or modifications in the program approved in accordance with paragraph (e) of this section, the person owning, operating, or controlling the impoundment shall obtain approval of such changes or modifications from the District Manager.

(g) The qualified person or persons referred to in paragraphs (a), (b)(4), (c), (e)(1), and (e)(2) of this section shall be trained to recognize specific signs of structural instability and other hazardous conditions by visual observation and, if applicable, to monitor instrumentation.

(Secs. 101, 508, Pub. L. 91-173, 83 Stat. 745, 803 (30 U.S.C. 811, 957))

[40 FR 41777, Sept. 9, 1975, as amended at 57 FR 7471, Mar. 2, 1992]

### **30 CFR § 77.216-4**

#### **Water, sediment or slurry impoundments and impounding structures; reporting requirements; certification.**

(a) Except as provided in paragraph (b) of this section, every twelfth month following the date of the initial plan approval, the person owning, operating, or controlling a water, sediment, or slurry impoundment and impounding structure that has not been abandoned in accordance with an approved plan shall submit to the District Manager a report containing the following information:

- (1) Changes in the geometry of the impounding structure for the reporting period.
- (2) Location and type of installed instruments and the maximum and minimum recorded readings of each instrument for the reporting period.
- (3) The minimum, maximum, and present depth and elevation of the impounded water, sediment, or slurry for the reporting period.
- (4) Storage capacity of the impounding structure.
- (5) The volume of the impounded water, sediment, or slurry at the end of the reporting period.
- (6) Any other change which may have affected the stability or operation of the impounding structure that has occurred during the reporting period.
- (7) A certification by a registered professional engineer that all construction, operation, and maintenance was in accordance with the approved plan.

(b) A report is not required under this section when the operator provides the District Manager with a certification by a registered professional engineer that there have been no changes under paragraphs (1) through (6) of this section to the impoundment or impounding structure. However, a report containing the information set out in paragraph of this section shall be submitted to the District Manager at least every 5 years.

[57 FR 7471, Mar. 2, 1992]

**30 CFR § 77.216-5****Water, sediment or slurry impoundments and impounding structures; abandonment.**

(a) Prior to abandonment of any water, sediment, or slurry impoundment and impounding structure which meets the requirements of 30 CFR [77.216\(a\)](#), the person owning, operating, or controlling such an impoundment and impounding structure shall submit to and obtain approval from the District Manager, a plan for abandonment based on current, prudent engineering practices. This plan shall provide for major slope stability, include a schedule for the plan's implementation and, except as provided in paragraph (b) of this section, contain provisions to preclude the probability of future impoundment of water, sediment, or slurry.

(b) An abandonment plan does not have to contain a provision to preclude the future impoundment of water if the plan is approved by the District Manager and documentation is included in the abandonment plan to ensure that the following requirements are met:

(1) A registered professional engineer, knowledgeable in the principles of dam design and in the design and construction of the structure, shall certify that it substantially conforms to the approved design plan and specifications and that there are no apparent defects.

(2) The current owner or prospective owner shall certify a willingness and ability to assume responsibility for operation and maintenance of the structure.

(3) A permit or approval for the continued existence of the impoundment or impounding structure shall be obtained from the Federal or State agency responsible for dam safety.

[57 FR 7472, Mar. 2, 1992]