Montana Department of
ENVIRONMENTAL QUALITY

Brian Schweitzer, Governor
Richard H. Opper, Director

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October 6, 2010

Dear Reader:

Enclosed for your review and comment is a Draft Checklist Environmental Assessment (CEA) for an amendment to the E.S. Stone and Structure, Inc., (ES Stone) operating permit (00163) located near Harlowton, MT. ES Stone, located at PO Box 28, Ryegate, MT 59074 filed an amendment on August 24, 2010 to their Operating Permit from the Montana Department of Environmental Quality (DEQ), Environmental Management Bureau in Helena. The amendment would add two sites for a total of 320 acres on private land to the existing thirteen sites and 4,439 permitted acres. ES Stone uses dozers, excavators or backhoes to pick up rock and boulders for landscaping and possible masonry purposes. The amendment would be on private land in the northwest quarter of Section 35, Township 8 North, Range 15 East (site 14) and the southern half of Section 26, Township 8 North, Range 15 East (site 15). Both sites are located about one mile southeast of Harlowton, MT. ES Stone would post a bond to ensure reclamation is completed.

This Draft CEA evaluates the potential impacts from this proposed amendment. The DEQ must decide whether to approve the permit as proposed, deny the request for an operating permit, or approve the operating permit with modifications.

The Draft CEA addresses issues and concerns raised during public involvement and from agency scoping. The agency has decided to approve the amendment with modifications. This is not a final decision. This conclusion may change based on comments received from the public on this Draft CEA, new information, or new analysis that may be needed in preparing the Final CEA.

Copies of the Draft CEA can be obtained by writing DEQ, Environmental Management Bureau, PO Box 200901, Helena, MT 59620, c/o Herb Rolfes, or calling (406) 444-3841; or sending email addressed to hrolfes@mt.gov. The Draft CEA will also be posted on the DEQ web page: www.deq.mt.gov. Public comments concerning the adequacy and accuracy of the Draft CEA will be accepted until October 22, 2010.

Since the Final EA may only contain public comments and responses, and a list of changes to the Draft CEA, please keep this Draft CEA for future reference.

Warren D. McCullough

Warren D. McCullough, Chief
Environmental Management Bureau

10/6/10
Date

File: 00176.353
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CHECKLIST ENVIRONMENTAL ASSESSMENT

COMPANY NAME: E.S. Stone and Structure, Inc., P. O. Box 28, Ryegate, MT 59074

PROJECT: Building stone quarry and rock collecting sites.

PERMIT OR LICENSE: Amendment Application 003 to Operating Permit 00163

LOCATION: Section 35 (NW1/4), Township 8 North, Range 15 East (Site 14) and Section 26 (S1/2), Township 8 North, Range 15 East (Site 15) in Wheatland County, about one mile southeast of Harlowton, MT (see location map).

COUNTY: Wheatland

PROPERTY OWNERSHIP: [ ] Federal [ ] State [X] Private

TYPE AND PURPOSE OF ACTION: E.S. Stone and Structure, Inc. (E.S. Stone) currently quarries and collects building stone under Operating Permit 00163 in Golden Valley, Wheatland and Cascade counties.

Operating Plan: E.S. Stone filed an application on August 24, 2010 for an amendment to Operating Permit 00163 from the Montana Department of Environmental Quality (DEQ), Environmental Management Bureau in Helena, MT. E.S. Stone has lease agreements with the landowners on which the two sites in this amendment would be located. Rock would be removed for the purpose of landscaping and masonry. The amendment areas would consist of a total of about 320 acres on private land.

E.S. Stone quarries landscaping and masonry rock found along outcrops, hilltops, and other areas. Rock is quarried from the surface to 16 feet deep. Large rock slabs are extracted with an excavator. Smaller rocks are picked with a backhoe or by hand.

Soil and overburden are stripped by dozers from the quarry and stockpiled for use in reclamation. The stone is then excavated using tracked excavators or backhoes. Excavated stone is sorted and either placed on pallets for shipment to market, taken to a sawing shop, or processed on site into block and brick sized stone.

Reclamation Plan: As each quarry or portion of a quarry is closed, the waste stone is backfilled into the pits or pushed into low piles if the quarrying does not create pits and depressions. Previously saved soil is spread over the recontoured ground and the areas are seeded with a native grass seed mix on areas of native range, or returned to agricultural production on areas that were previously farmed. Temporary sheds housing rock splitters would be removed at closure of operations. Soil in the staging area would be scarified before seeding.

The proposed amendment has been reviewed for compliance under a Supplemental Programmatic Environmental Assessment (SPEA) for a General Quarry Operating Permit published by the DEQ in February 2004. The sites meet all the requirements under the SPEA except that the disturbance cannot be kept below five acres disturbed and unreclaimed at any one time. E.S. Stone would have a pallet and splitting yard. Up to 40 acres could be disturbed at any one time on each of the two proposed sites.

E.S. Stone currently has 4,439 acres of permit area on 13 sites approved under Operating Permit 00163, of which a total of 500 acres can be disturbed at any one time. One thousand acres could be disturbed over the life

of mining. This permit amendment would add 320 acres to the permit area, for a total of 4,759 acres over 15 sites. With approval of this amendment a total of 1,500 acres could be disturbed over the life of mining, with no more than 500 acres disturbed at any one time.

N = Not present or No Impact will occur.
Y = Impacts may occur (explain under Potential Impacts).
N/A = Not Applicable

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACT AND MITIGATION MEASURES
1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?	[Y] The soils that will be impacted in the various sites are predominantly Tally gravelly fine sandy loam, Doney-Cabba loam, Mecar loam, and the Fairway Loam. The soils formed on slopes ranging from zero to eight percent. The typical profile is 0 to 6 inches of loam. The depth to bedrock is 40 to 80 inches. The soils are well drained, and the depth to groundwater is more than 80 inches (NRCS, 2010). Concurrent reclamation would limit the amount of soil susceptible to erosion from wind or water. During periods of extreme drought, reclamation seedings may fail with some resulting loss of soil. Failed seedings would be reseeded until vegetation is successfully established. No new roads would be constructed. Traffic volume and truck weight will not increase as a result of approval of the amendment. Removal of rocks from the surface is an unavoidable impact of rock product operations.
2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?	[N] The nearest source of surface water is the Musselshell River which is to the north of Site 15. There is an intermittent drainage to the south of Site 14. Two wells exist near site 14 and four near Site 15. The wells vary from 17 to 252 feet in depth. The depth to water varies from 7 to 28 feet. The more shallow wells are located near the Musselshell River. The wells are used for monitoring, stockwater, and irrigation. The proposed excavations are relatively shallow and should not impact groundwater. As a mitigation the operator will keep all disturbances at least 100 feet away from surface water. E.S. Stone has committed to retrieve and properly dispose of any spilled fuel or contaminated materials.
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality	[Y] There would be dust produced by the operations due to travel on the gravel roads commonly found in the area. The landowners can require dust control as needed on their leases to the company. Concurrent

IMPACTS ON THE PHYSICAL ENVIRONMENT	
regulations or zones (Class I airshed)?	reclamation would limit the potential for blowing dust from the operating area. The rock fragments left in the soils would also limit blowing dust.
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	[Y] The native plant communities on these shallow to very shallow range sites are dominated by native grasses. The plant communities that would be impacted are common in the sedimentary plains of Montana. The sites are on native range used for grazing and crops. A search of the Montana Natural Heritage Program (MNHP) database at the Montana State Library in Helena, MT found that there are no known threatened and endangered (T&E) species present. MNHP indicated that there is a species of concern located at both of the sites. The Small Dropseed is an annual plant and would reproduce from seed if soil is replaced after reclamation is completed. It would likely be naturally found on disturbed sites. Disturbance on the sites would lead to more noxious weed invasion in the area, especially from the existing populations of leafy spurge. Weed control efforts would limit these impacts. The disturbed lands would be reclaimed to livestock grazing and dryland farming.
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[Y] The rock product area is commonly used by mule deer and antelope. They would be displaced around the human activity until reclamation is completed. There is no winter range for ungulate species or aquatic habitat in the permit area.
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?	[N] Bald eagles are seasonal migrants through the area, but do not remain in the uplands. They are more closely associated with the Missouri River valley. Eagles may use the outcrops as perching sites. A Bald eagle was sighted in the area in 2005. MNHP indicated that a number of animal species of concern have either been sighted in the area or could be expected to be found in the permit boundaries. These species include: Ferruginous hawk, Northern redbelly dace, and the Greater Short-horned lizard. A Ferruginous hawk was sighted in the area in 2000, and a Greater Short-horned lizard in 1933. The Ferruginous hawk is associated with the Musselshell River and not the uplands where the rock collecting activities would occur. The Northern redbelly dace has not been observed.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] A records search by the State Historic Preservation Office did not return any historical or archaeological sites. The proposed sites have the potential to impact cultural resources. E.S. Stone has committed to protect any resources found.
8. AESTHETICS: Is the project on a	[Y] The proposed rock collecting sites are in a rural area. Activity would

IMPACTS ON THE PHYSICAL ENVIRONMENT	
prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	be visible from some county roads during operations, but the disturbance created would not be readily apparent in the absence of construction equipment. Soil will be replaced after the rock has been removed, and then scarified and reseeded. The reclaimed rock collecting sites would not appear as the original rangeland in the area. This is an unavoidable impact of quarrying activities.
9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?	[N] This project would be isolated and require a minimum of energy resources.
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	[N] The surrounding land use is livestock grazing and dryland farming.

IMPACTS ON THE HUMAN POPULATION	
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N]
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N] These operations are a source of income for area ranchers.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] Stone producing operations in Wheatland County are major employers, providing work for a segment of the population that is otherwise unemployed, or underemployed.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] This project would create tax revenue.
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.)	[N] There is no anticipated need for increased government services as a result of this project.

IMPACTS ON THE HUMAN POPULATION	
be needed?	
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N]
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N] There are no wilderness or major recreational areas on private land in these counties.
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N]
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] The work force would be local or drawn from neighboring counties. The royalty payments made to landowners would help maintain the sometimes tenuous existence of the family owned farms and ranches recovering from the regional drought.
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N]
21. PRIVATE PROPERTY IMPACTS: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.	[Y]
22. PRIVATE PROPERTY IMPACTS: Does the proposed regulatory action restrict the use of the regulated person's private property? If not, no further analysis	[N]

IMPACTS ON THE HUMAN POPULATION	
is required.	
23. PRIVATE PROPERTY IMPACTS: Does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternatives.	[N/A]
24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]

25. Alternatives Considered:
No Action: Deny the request for operating permit. No issues were identified which would require denying the permit.
Approval: Approve the permit as proposed.
Approval with Modification: Surface water exists near the two sites. As a mitigation the operator will keep all disturbances at least 100 feet away from surface water.
26. Public Involvement: A legal notice and press release have been published on receipt of the application for an amendment to the operating permit. No comments were received. A legal notice and press release will be published with release of the Draft EA.
27. Other Governmental Agencies with Jurisdiction: None
28. Magnitude and Significance of Potential Impacts: There would be no significant impacts associated with this proposal.
29. Building stone quarries and rock collecting sites are increasing throughout Montana. DEQ has prepared a SPEA on these operations. The operations that qualify must meet the following provisions:

- Any individual small quarry may maintain a working disturbance of up to five acres. Total disturbance during the life of an individual operation could exceed five acres, but concurrent reclamation would be required to keep the disturbance at any one time to five acres or less. Access roads would not be included in the disturbed total, but the operator would submit a reclamation bond for roads that do not have an approved use after quarrying. Roads approved for the land use after quarrying and access or haulage roads which are required by a local, state, or federal agency having jurisdiction over that road would not have to be bonded;
- There would be no impact to any wetland, surface or ground water;
- There would be no constructed impoundments or reservoirs used in the operation;
- There would be no potential to produce any acid or other pollutive drainage from the quarry;
- There would be no impact to threatened and endangered species; and

- There would be no impact to significant historic or archaeological features.

The sites proposed by E.S. Stone meet all of these requirements except the operator cannot keep the disturbance to less than five acres disturbed and unreclaimed at any one time. Even though the site may exceed five acres disturbed and unreclaimed at any one time, there would be no other impacts other than the size of the disturbance area over those analyzed in the SPEA. This Checklist EA tiers to the 2004 SPEA and the 2007 EA for amendment 003. Reclamation would limit impacts. DEQ would bond E.S. Stone to reclaim acres disturbed by quarrying.

Many acres could be potentially disturbed by quarry operations throughout Montana as a result of the demand for building stone. Previously, operating permits were issued to Bozeman Brick, Block, and Tile and Rocky Mountain Stone for sites in Wheatland County. The cumulative impacts from these operations can lead to more soil disturbance requiring reclamation, more impacts to native plant communities and increased potential for noxious weed invasion and spread, as well as economic benefits to the local economies from quarry operations.

30. Recommendation for Further Environmental Analysis:

[ ] EIS [ ] More Detailed EA [X] No Further Analysis

The DEQ has selected the Approval with Modification as the preferred alternative.

31. References:
NRCS, 2010. Custom Soil Resource Report for Wheatland County Area, Montana.

32. EA Checklist Prepared By:
Herb Rolfes, DEQ Operating Permits Section Supervisor
Wayne Jepson, DEQ Reclamation Specialist

33. This EA was reviewed by:
Warren McCullough, DEQ, Environmental Management Bureau, Chief

Approved By:

Warren D. McCullough 10/6/10

Signature Date
Warren D. McCullough, Chief
Environmental Management Bureau, DEQ

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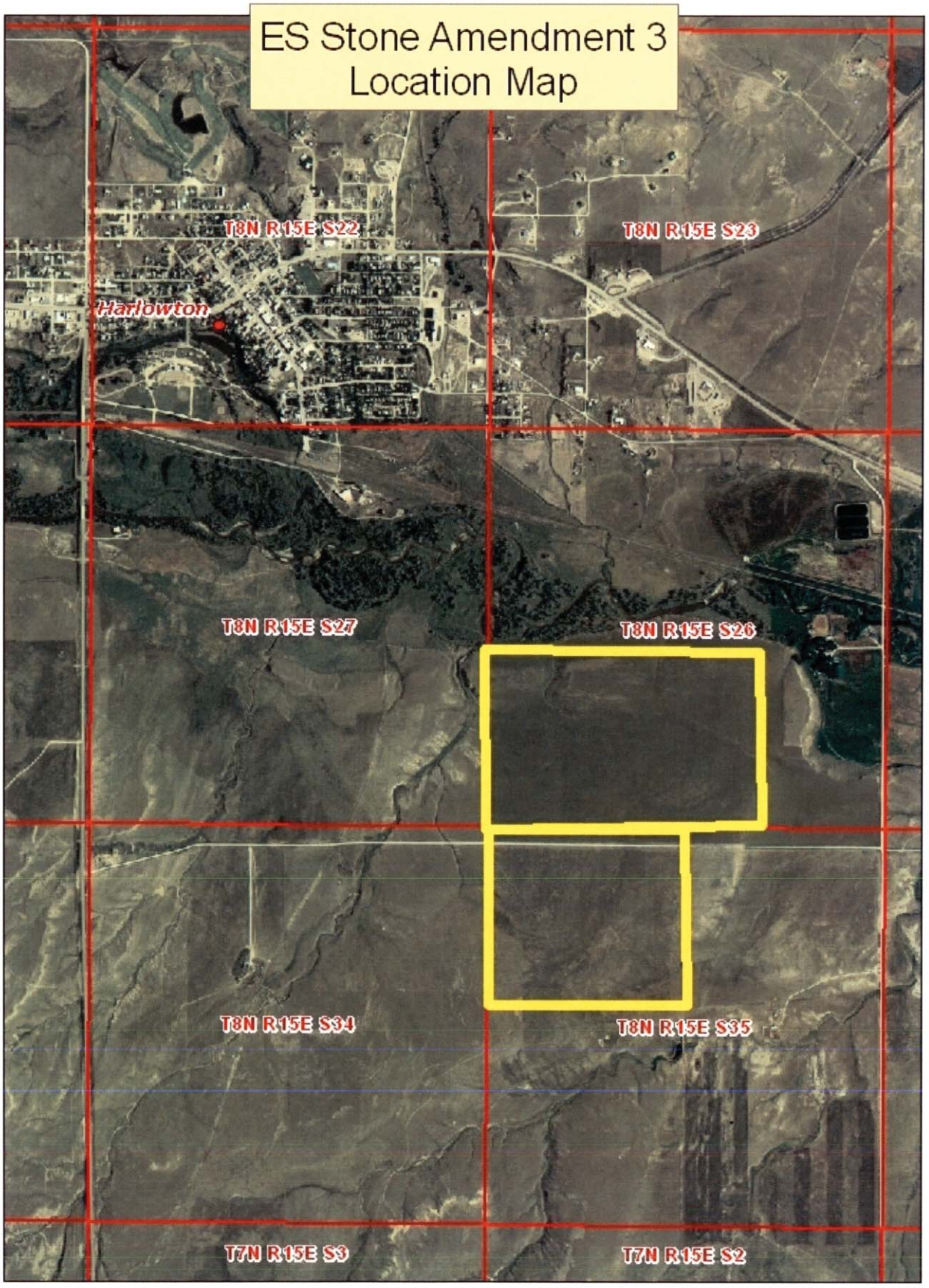
ES Stone Amendment 3 Location Map



Location of the Amendment 3 Disturbance Area